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A

VOYAGE

TO

SOUTH AMERICA:

DESCRIBING AT LARGE

THE SPANISH CITIES, TOWNS, PROVINCES, &c.

ON THAT

EXTENSIVE CONTINENT:

UNDERTAKEN, BY COMMAND OF THE KING OF SPAIN,

BY

DON GEORGE JUAN,

AND

DON ANTONIO DE ULLOA,

CAPTAINS OF THE SPANISH NAVY,

FELLOWS OF THE ROYAL SOCIETY OF LONDON,

MEMBERS OF THE ROYAL ACADEMY AT PARIS, &c. &c.

TRANSLATED FROM THE ORIGINAL SPANISH;

WITH

NOTES AND OBSERVATIONS; AND AN ACCOUNT OF THE BRAZILS.

BY JOHN ADAMS, ESQ. OF WALTHAM ABBEY;

Who resided several Years in those Parts.

THE FIFTH EDITION.

ILLUSTRATED WITH PLATES.

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A VOYAGE

A

VOYAGE

TO

SOUTH AMERICA.

BOOK VII.

Account of our Journey to Lima; with a Description of the Towns and Settlements on the Road, and of the City of Lima.

CHAP. I.

Journey from Quito to Truxillo.

THE accidents to which human enterprizes and attempts are generally exposed, direct, with an inconstant but wonderful harmony, the series of our actions and adventures, and introduce among them a great variety of alterations and changes. It is this variety, which in vegetation embellishes nature, and equally displays the glory and wisdom of the Supreme Creator in the political and rational world; where we admire the surprizing diversity of events, the infinity of human actions,

and the different schemes and consequences in politics, the successive chain of which renders history so delightful, and, to a reflecting mind, so instructive. The inconstancy so often seen in things the most solid and stable, is generally one of the most powerful obstacles, to the advantages which might otherwise be derived from works of any duration. However great they are, either in reality, or idea, the perfection of them is not only impeded by the vicissitudes of time, and the inconstancy of things, but they even decline, and fall into ruins: some, thro' want of proper support and encouragement; while others, from the mind being wearied out by delays, difficulties, and a thousand embarrassments, are abandoned; the imagination being no longer able to pursue its magnificent scheme.

To measure some degrees of the meridian near the equator, the principal intention of our voyage, if considered only in idea, and abstractedly from the difficulties which attended its execution, must appear easy, and as requiring no great length of time; but experience convinced us, that a work of such importance to the improvement of science, and the interest of all nations, was not to be performed without delays, difficulties and dangers; which demanded attention, accuracy, and perseverance. Besides the difficulties necessarily attending the requisite accuracy of these observations, the delays we were obliged to make in order to take them in the most favourable seasons, the intervening clouds, the Paramos, and disposition of the ground, were so many obstacles to our making any tolerable dispatch; and these delays filled us with apprehensions, that if any other accidents should happen, the whole design would be rendered abortive, or at least, suffer a long interruption.

It has already been observed that while we were at Cuença, finishing our astronomical observations in that extremity of the arch of the meridian, we unexpectedly

expectedly received a letter from the marquis de Villa Garcia, vice-roy of Peru, desiring us to come with all speed to his capital: any delay on our part might have been improper; and we were solicitous not to merit an accusation of the least remissness in his majesty's service. Thus we were under a necessity of suspending our observations for some time;* though all that remained was the second astronomical observation, northward, where the series of our triangles terminated.

THE occasion of this delay, arose from an account, received by the vice-roy, that war being declared between Spain and England, the latter was sending a considerable fleet on some secret designs into those seas. Several precautions had been taken to defeat any attempt; and the vice-roy, being pleased to conceive that we might be of some use to him in acquitting himself with honour on this occasion, committed to us the execution of some of his measures; giving us to understand, that the choice he made of us, was the most convincing proof of the high opinion he entertained of our abilities; and indeed our obligations were the greater, as the distance of four hundred leagues had not obliterated us from his remembrance, of which he now gave us so honourable a proof.

ON the 24th of September, 1740, the vice-roy's letter was delivered to us, and we immediately repaired to Quito, in order to furnish ourselves with necessaries for the journey.

EVERY thing being performed, we set out from that city on the 30th of October, and determined to go by Guaranda and Guayaquil; for tho' there is a road by land thro' Cuença and Loja, yet the other seemed to us the most expeditious, as the ways are neither so bad, nor mules and other beasts of carriage so difficult to be met with. The long stays in villages

* Vol. 1. Book V. Chap. II.

were here also little to be apprehended, which are frequently rendered necessary in the other road by inundations, rivers, and precipices.

On the 30th of October we reached the Bodegas, or warehouses, of Babayoho, where taking a canoo we went down the river to Guayaquil; and embarking on board a small ship bound for Puna, we anchored in that port November the 3d. At this place we hired a large balza, which brought us through the gulph to Machala. For though the usual route is by the Salto de Tumbez, we were obliged to alter our course, the pilot not being well acquainted with the entrance of a creek, through which you pass to the Salta.

On the 5th in the morning our balza landed us on the coast of Machala, from whence we travelled by land to the town, the distance being about two short leagues. The next day we sent away our baggage in a large canoo to the Salto de Tumbez; going myself in the same canoo, being disabled by a fall the preceding day. Don George Juan, with the servants, followed on horseback: the whole country being level, is every where full of salt marshes, and overflows at high water, so that the track is not sufficient for two to go abreast.

The Salto, where I arrived on the 7th at night, is a place which serves as a kind of harbour for boats and small vessels. It is situated at the head of some creeks, particularly that of the Jambeli, between fourteen and sixteen leagues from the coast, but entirely destitute of inhabitants, no fresh water being found in any part of the adjacent country; so that it only serves for landing goods consigned to Tumbez, where they are carried on mules, kept there for this purpose; and in this its whole trade consists. The Salto is uninhabited; nor does it afford the least shelter, all the goods brought thither being deposited in a small square; and, as rain is seldom or never known here,

there is little danger of their receiving any damage before they are carried to Tumbez.

HERE, as along the sides of all the creeks, the mangrove-trees stand very thick, with their roots and branches so interwoven as to be absolutely impenetrable; tho' the swarms of muschetos are alone sufficient to discourage any one from going among them. The only defence against these insects is, to pitch a tent, till the beasts are loaded, and you again move forward. The more inland parts, where the tides do not reach, are covered with forests of smaller trees, and contain great quantities of deer; but at the same time are infested with tigers; so that if the continual stinging of the moschetos deprives travellers of their rest, it also prevents their being surprised by the tigers, of the fury of which there are many melancholy examples.

ON the 9th in the morning I arrived at the town of Tumbez, situated seven leagues from the Salto; the whole country through which the road lies is entirely waste, part of it being overflowed by the tides, and the other part dead sands, which reflect the rays of the sun so intensely, as to render it necessary in general to perform this journey in the night; for travelling seven leagues thither, and as many back, without either water or fodder, is much too laborious for the mules to undergo in the day-time. A drove of mules therefore never sets out from Tumbez for the Salto, till an account arrives, generally by one of the sailors belonging to the vessel, of the goods being landed, and every thing in readiness; as it would otherwise be lost labour, it being impossible that the mules should make any stay there.

DON GEORGE JUAN had reached Tumbez on the 8th, and though he did every thing in his power to provide mules for continuing our journey, we were obliged to wait there some time longer. Nor could we make any advantage of our stay here, except to observe

observe the latitude, which we did on the ninth with a quadrant, and found it to be 3° 13′ 16″ south.

Near Tumbez, is a river of the same name, which discharges itself into the bay of Guayaquil, almost opposite to the island of St. Clare. Barks, boats, balzas, and canoos, may go up and down this river, being three fathom deep and twenty-five broad; but it is dangerous going up it in the winter season, the impetuosity of its current being then increased by torrents from the mountains. At a little distance from the Cordillera, on one side of the banks of the river, stands the town of Tumbez in a very sandy plain, interspersed with some small eminences. The town consists only of seventy houses, built of cane, and thatched, scattered up and down without any order or symmetry. In these houses are about one hundred and fifty families of Mestizos, Indians, Mulattoes, and a few Spaniards. There are besides these other families living along the banks of the river, who having the conveniency of watering their grounds, continually employ themselves in rural occupations.

The heat is excessive; nor have they here any rain for several years successively; but when it begins to fall, it continues during the winter. The whole country from the town of Tumbez, to Lima, contained between the foot of the Cordillera and the sea, is known by the name of Valles, which we mention here, as it will often occur in the remaining parts of this narrative.

Tumbez was the place where in the year 1526, the Spaniards first landed in these parts of South America, under the command of Don Francisco Pizarro; and where he entered into several friendly conferences with the princes of the country, but vassals to the Yncas. If the Indians were surprized at the sight of the Spaniards, the latter were equally so at the prodigious riches which they every where saw, and the largeness of the palaces, castles, and temples;

temples; of all of which, though built of stone, no vestiges are now remaining.

Along the delightful banks of this river, as far as the water is conveyed, maize, and all other fruits and vegetables that are natives of a hot climate, are produced in the greatest plenty. And in the more distant parts, which are destitute of this advantage, grows a kind of leguminous tree, called algarrobale, producing a bean, which serves as food for all kinds of cattle. It resembles almost that known in Spain by the name of valencia; its pod being about five or six inches long, and only four lines broad, of a whitish colour, intermixed with veins of a faint yellow. It proves a very strengthening food to beasts of labour, and is used in fattening those for the slaughter, which hence acquire a taste remarkably delicious.

On the 14th, I arrived at the town of Piura, where I was obliged to wait some time for Don George Juan, during which I entirely recovered from the indisposition I before laboured under from my fall.

Here I experienced the efficacy of the Calaguala; which I happily found not to fall short of the great reputation it has acquired in several parts of Europe.

From the town of Tumbez, to the city of Piura, is 62 leagues, which we performed in 54 hours, exclusive of those we rested; so that the mules, which always travel one constant pace, go something above a league an hour. To the town of Amotape, the only inhabited place in the whole road, is 48 leagues: the remaining part is one continued desart. At leaving Tumbez, its river is crossed in balzas, after which for about two leagues the road lies through thickets of algarrobale, and other trees, at the end of which the road runs along the sea-coast to Mancora, 24 leagues from Tumbez. In order to travel this road, an opportunity at low water must be taken for crossing a

place

place called Malpasso, about six leagues from Tumbez; for being a high steep rock, washed by the sea during the flood, and the top of it impassable from the many chasms and precipices, there is a necessity of passing between the sea and its basis, which is about half a league in length. And this must be done before the flood returns, which soon covers this narrow way, though it is very safe at low water. During the remainder of this journey, it is equally necessary to consult the tide; for the whole country being sandy, the mules would, from their sinking so deep in it, be tired the first league or two. Accordingly travellers generally keep along the shore, which being washed by the breaking of the waves, the sand is more compact and firm; and consequently much easier to the beasts. During the winter, there runs through Mancora a small rivulet of fresh water, to the great relief of the mules; but in summer the little remaining in its course is so brackish, that nothing but absolute necessity can render it tolerable. The banks of this rivulet are so fertile by its water, that it produces such numbers of large algarrobales, as to form a shady forest.

From Mancora, the road for fourteen leagues runs between barren mountains, at some distance from the coast, with very troublesome ascents and declivities, as far as the breach of Parinnas; where the same cautions are to be observed as at Mancora, and is the second stage; from whence the road lies over a sandy plain, ten leagues in length, to the town of Amotape, and at some distance from the coast.

This town, which stands in 4° 51′ 43″ south latitude, is an appendix to the parish of Tumbez, belonging to its lieutenancy, and in the jurisdiction of Piura. The houses are about 30 in number, and composed of the same materials with those of Tumbez; but the inhabitants are only Indians and Mestizos. A quarter of a league from it is a river of the same

same name, and whose waters are of such prodigious use to the country, that it is every where cultivated, and divided into fields, producing plenty of the several grains, esculent vegetables, and fruits, natural to a hot climate; but like Tumbez, is infested with moschetos. This river in summer may be forded; but in winter, when the torrents descend from the mountains, it must be crossed in a balza, the rapidity of its current being then considerably increased. There is a necessity for passing it in going to Piura, and after this for about four leagues the road lies through woods of lofty algarrobales. These woods terminate on a sandy plain, where even the most experienced drivers and Indians sometimes lose their way, the wind levelling those hills of sand which served as marks, and effacing all the tracks formerly made: so that in travelling this country, the only direction is the sun in the day-time, and the stars in the night; and the Indians being little acquainted with the situation of these objects, are often bewildered, and exposed to the greatest hardships before they can again find their way.

From what has been said, the difficulties of travelling this road may be conceived. Besides, as far as Amotape, not only all kinds of provisions must be carried, but even water, and the requisites for kindling a fire, unless your provision consists of cold meat. In this last stage is a mine of cope, a kind of mineral tar, great quantities of which are carried to Callao, and other ports, being used in ships instead of naphtha, but has the ill quality of burning the cordage; its cheapness however induces them to use it mixed with naphtha.

The city of Piura, which is at present the capital of its jurisdiction, was the first Spanish settlement in Peru. It was founded in the year 1531 by Don Francisco Pizarro, who also built the first church in it. This city was originally called San Miguel de Piura,

Piura, and stood in the valley of Targasala, from whence, on account of the badness of the air, it was removed to its present situation, which is on a sandy plain. The latitude of it is 5° 11′ 1″ south, and the variation of the needle we observed to be 8° 15′ easterly. The houses are either of bricks dried in the sun, or a kind of reeds called quinchas, and few of them have any story. Here the Corregidor resides, whose jurisdiction extends on one side along Valles, and on the other among the mountains. Here is an office for the royal revenue, under an accomptant or treasurer, who relieve each other every six months, one residing at the port of Paita, and the other in this place: at the former for receiving the duties on imports for goods landed there, and also for preventing a contraband trade; and at the latter for receiving the revenues and merchandizes on goods consigned from the mountains to Loja, or going from Tumbez to Lima.

This city contains near fifteen hundred inhabitants; and among these some families of rank, besides other Spaniards, Mestizos, Indians, and Mulattoes. The climate is hot and very dry, rains being seldomer known here than at Tumbez; notwithstanding which it is very healthy. It has a river of great advantage to the inhabitants as well as the adjacent country, the soil of which is sandy, and therefore easier penetrated by the water; and being level, the water is conveyed to different parts by canals. But in the summer the river is absolutely destitute of water, the little which descends from the mountains being absorbed before it reaches the city; so that the inhabitants have no other method of procuring water, but by digging wells in the bed of the river, the depth of which must be proportioned to the length of time the drought has continued.

Piura has an hospital under the care of the Bethlemites; and though patients afflicted with all kinds of

distempers are admitted, it is particularly famous for the cure of the French disease, which is not a little forwarded by the nature of the climate. Accordingly there is here a great resort of persons infected with that infamous distemper; and are restored to their former health by a less quantity of a specific than is used in other countries, and also with greater ease and expedition.

As the whole territory of this jurisdiction within Valles produces only the algarroba, maize, cotton, grain, a few fruits and esculent vegetables, most of the inhabitants apply themselves to the breeding of goats, great numbers of which are continually sold for slaughter, and from their fat they make soap, for which they are sure of a good market at Lima, Quito, and Panama; their skins are dressed into leather called Cordovan, and for which there is also a great demand at the above cities. Another branch of its commerce is the Cabuya, or Pita, a kind of plant from whence a very fine and strong thread is made; and which abounds in the mountainous parts of its jurisdiction. Great advantages are also made from their mules; as all the goods sent from Quito to Lima, and also those coming from Spain, and landed at the port of Paita, cannot be forwarded to the places they are consigned to but by the mules of this province; and from the immense quantity of goods coming from all parts, some idea may be formed of the number of beasts employed in this trade, which continues more or less throughout the year, but is prodigious when the rivers are shallow.

Don George Juan being arrived at Piura, every thing was got ready with the utmost dispatch, and on the 21st we continued our journey. The next day we reached the town of Sechura, ten leagues distant from Piura, according to the time we were travel-

travelling it. The whole country between these two places is a level sandy desart.

Though the badness and danger of the roads in Peru scarce admit of any other method of travelling than on mules, yet from Piura to Lima there is a conveniency of going in litters. These instead of poles are suspended on two large canes, like those of Guayaquil, and are hung in such a manner as not to touch the water in fording rivers, nor strike against the rocks in the ascents or descents of difficult roads.

As the mules hired at Piura perform the whole journey to Lima, without being relieved, and in this great distance, are many long desarts to be crossed, the natural fatigue of the distance, increased by the sandiness of the roads, render some intervals of rest absolutely necessary, especially at Sechura, because on leaving that town we enter the great desart of the same name. We tarried here two days; during which we observed the latitude, and found it 5° 32′ 33 $\frac{1}{2}$″ S.

The original situation of this town was contiguous to the sea, at a small distance from a point called Aguja; but being destroyed by an inundation, it was thought proper to build the present town of Sechura about a league distance from the coast, near a river of the same name, and which is subject to the same alterations as that of Piura; for at the time we crossed it no water was to be seen; whereas from the months of February or March till August or September, its water is so deep and the current so strong, as to be passed only in balzas; as we found in our second and third journey to Lima. When the river is dry, the inhabitants make use of the above-mentioned expedient of digging wells in its beds, where they indeed find water but very thick and brackish. Sechura contains about 200 houses of cane, and a large and handsome brick church; the inhabitants are

are all Indians, and consist of near 400 families, who are all employed either as drivers of the mules or fishermen. The houses of all these towns are quite simple; the walls consisting only of common canes and reeds, fixed a little way in the ground, with flat roofs of the same materials, rain being hardly ever known here; so that they have sufficient light and air, both the rays of the sun and wind easily find a passage. The Indian inhabitants of this place use a different language from that common in the other towns both of Quito and Peru; and this is frequently the case in great part of Valles. Nor is it only their language which distinguishes them, but even their accent; for besides their enunciation, which is a kind of melancholy singing, they contract half of their last words, as if they wanted breath to pronounce them.

The dress of the Indian women in these parts, consists only of an anaco, like that of the women of Quito, except its being of such a length as to trail upon the ground. It is also much larger, but without sleeves, nor is it tied round them with a girdle. In walking they take it up a little, and hold it under their arms. Their head-dress consists of cotton cloth laced or embroidered with different colours; but the widows wear black. The condition of every one may be known by their manner of dressing their hair, maids and widows dividing it into two platted locks, one hanging on each shoulder, whilst married women braid all their hair in one. They are very industrious, and usually employed in weaving napkins of cotton and the like. The men dress in the Spanish manner; and consequently wear shoes; but the women none. They are naturally haughty, of very good understandings, and differ in some customs from those of Quito. They are a proof of what has been observed (Book VI. Chap. VI. vol. I.) with regard to the great improvement they receive

receive from a knowledge of the Spanish language; and accordingly it is spoken here as fluently as their own. They have genius, and generally succeed in whatever they apply themselves to. They are neither so superstitious, nor so excessively given to vice as the others; so that except in their colour and other natural appearances, they may be said to differ greatly from them; and even in their propensity to intemperance, and other popular customs of the Indians, a certain moderation and love of order is conspicuous among these. But to avoid tedious repetitions, I shall conclude with observing, that all the Indians of Valles from Tumbez to Lima are industrious, intelligent, and civilized beyond what is generally imagined.

The town of Sechura is the last in the jurisdiction of Piura, and its inhabitants not only refuse to furnish passengers with mules, but also will not suffer any person of whatever rank, to continue his journey, without producing the Corregidor's passport. The intention of this strictness is to suppress all abuses in trade; for there being besides this road which leads to the desart, only one other called the Rodeo; one of them must be taken; if that of the desart, mules must be hired at Sechura for carrying water for the use of the loaded mules when they have performed half their journey. This water is put into large callebashes, or skins, and for every four loaded mules one mule loaded with water is allowed, and also one for the two mules carrying the litter. When they travel on horseback, the riders carry their water in large bags or wallets made for that purpose; and every one of the passengers, whether in the litter or on horseback, provides himself with what quantity he thinks sufficient, as during the whole journey nothing is seen but sand and hills of it formed by the wind, and here and there masses of

of salt; but neither sprig, herb, flower, or any other verdure.

ON the 24th we left Sechura, and crossed the desart, making only some short stops for the ease of our beasts, so that we arrived the next day at five in the evening at the town of Morrope, 28 or 30 leagues distance from Sechura, tho' falsely computed more by the natives. The extent and uniform aspect of this plain, together with the continual motion of the sand which soon effaces all tracks, often bewilders the most experienced guides, who however shew their skill in soon recovering the right way; for which they make use of two expedients: 1st, to observe to keep the wind directly in their face; and the reverse upon their return; for the south winds being constant here, this rule cannot deceive them: 2d, to take up a handful of sand at different distances, and smell to it; for as the excrements of the mules impregnate the sand more or less, they determine which is the true road by the scent of it. Those who are not well acquainted with these parts, expose themselves to great danger, by stopping to rest or sleep; for when they again set forward, they find themselves unable to determine the right road; and when they once have lost the true direction, it is a remarkable instance of Providence if they do not perish with fatigue or distress, of which there are many melancholy instances.

THE town of Morrope consists of between 70 and 80 houses, built like those in the preceding towns; and contains about 160 families, all Indians. Near it runs a river called Pozuelos, subject to the same changes as those above-mentioned: though the lands bordering on its banks are cultivated, and adorned with trees. The instinct of the beasts used to this road is really surprizing; for even at the distance of four leagues, they smell its water, and become so impatient that it would be difficult to stop them; accordingly

cordingly they pursue themselves the shortest road, and perform the remainder of the journey with remarkable chearfulness and dispatch.

On the 26th we left Morrope, and arrived at Lambayeque, four leagues from it: and being obliged to continue there all the 27th, we observed its latitude, and found it 6° 41′ 37″ S. This place consists of about 1500 houses, built some of bricks, others of bajareques, the middle of the walls being of cane, and plaistered over, both on the inside and outside, with clay: the meanest consist entirely of cane, and are the habitations of the Indians. The number of inhabitants amount to about 3000, and among them, some considerable and opulent families; but the generality are poor Spaniards, Mulattoes, Mestizos, and Indians. The parish-church is built of stone, large and beautiful, and the ornaments splendid. It has four chapels called ramos, with an equal number of priests, who take care of the spiritual concerns of the Indians, and also attend, by turns, on the other inhabitants.

The reason why this town is so populous is, that the families which formerly inhabited the city of Sana, on its being sacked in 1685, by Edward Davis, an English adventurer, removed hither; being under a farther necessity of changing their dwelling from a sudden inundation of the river of the same name, by which every thing that had escaped the ravages of the English was destroyed. It is the residence of a Corregidor, having under his jurisdiction, besides many other towns, that of Morrope. One of the two officers of the revenue appointed for Truxillo, resides here. A river called Lambayeque, washes this place; which, when the waters are high, as they were when we arrived here, is crossed over a wooden bridge; but at other times may be forded, and often is quite dry.

The neighbourhood of Lambayeque, as far as the industry

industry of its inhabitants have improved it, by canals cut from the river, abounds in several kinds of vegetables and fruits; some of the same kind with those known in Europe, and others of the Creole kind, being European fruits planted there, but which have undergone considerable alterations from the climate. About ten leagues from it are espaliers of vines, from the grapes of which they make wine, but neither so good, nor in such plenty as in other parts of Peru. Many of the poor people here employ themselves in works of cotton, as embroidered handkerchiefs, quilts, mantelets, and the like.

On the 28th we left Lambayeque, and having passed through the town of Monsefu, about four or five leagues distant from it, we halted near the sea coast, at a place called Las Lagunas, or the Fens; these contain fresh water left in them by the overflowings of the river Sana. On the 29th we forded the river Xequetepeque, leaving the town of that name at the distance of about a quarter of a league, and in the evening arrived at the town of St. Pedro, twenty leagues from Lambayeque, and the last place in its jurisdiction. By observation we found its latitude to be 7° 25′ 49″ S.

St. Pedro consists of about 130 baxaraque houses, and is inhabited by 120 Indian families, 30 of Whites and Mestizos, and 12 of Mulattoes. Here is a convent of Augustines, though it seldom consists of above three persons, the prior, the priest of the town, and his curate. Its river is called Pacasmayo, and all its territories produce grain and fruits in abundance. A great part of the road from Lambayeque to St. Pedro, lies along the shore, not indeed at an equal, but never at a great distance from it.

On the 30th of November we passed through the town of Payjan, which is the first in the jurisdiction of Truxillo, and on the first of December we reached that of Chocope, 13 or 14 leagues distant from

St. Pedro. We found its latitude to be 7° 46′ 40″ S. The adjacent country being watered by the river called Chicama, distributed to it by canals, produces the greatest plenty of sugar canes, grapes, fruits of different kinds, both European and Creole: and particularly maize, which is the general grain used in all Valles. From the banks of the river Lambayeque to this place, sugar canes flourish near all the other rivers, but none of them equal, either in goodness or quantity, those near the river Chicama.

Chocope consists of betwixt 80 and 90 baxareque houses, covered with earth. The inhabitants, who are between 60 and 70 families, are chiefly Spaniards, with some of the other casts; but not above 20 or 25 of Indians. Its church is built of bricks, and both large and decent. They report here, as something very remarkable, that in the year 1726, there was a continual rain of 40 nights, beginning constantly at four or five in the evening, and ceasing at the same hour next morning, the sky being clear all the rest of the day. This unexpected event intirely ruined the houses, and even the brick church, so that only some fragments of its walls remained. What greatly astonished the inhabitants was, that during the whole time the southerly winds not only continued the same, but blew with so much force, that they raised the sand, though thoroughly wet. Two years after a like phænomenon was seen for about eleven or twelve days, but was not attended with the same destructive violence as the former. Since which time nothing of this kind has happened, nor had any thing like it been remembered for many years before.

CHAP.

CHAP. II.

Our arrival at Truxillo; a Description of that City, and the Continuance of our Journey to Lima.

WITHOUT staying any longer at Chocope than is usual for resting the beasts, we continued our journey, and arrived at the city of Truxillo, 11 leagues distant, and, according to our observations, in 8° 6′ 3″ S. latitude. This city was built in the year 1535, by Don Francisco Pizarro, in the valley of Chimo. Its situation is pleasant, notwithstanding the sandy soil, the universal defect of all the towns in Valles. It is surrounded by a brick wall, and its circuit entitles it to be classed among cities of the third order. It stands about half a league from the sea, and two leagues to the northward of it is the port of Guanchaco, the channel of its maritime commerce. The houses make a creditable appearance. The generality are of bricks, decorated with stately balconies, and superb porticos; but the other of baxareques. Both are however low, on account of the frequent earthquakes; few have so much as one story. The corregidor of the whole department resides in this city; and also a bishop (whose diocese begins at Tumbez) with a chapter consisting of three dignitaries, namely, the dean, arch-deacon, and chanter; four canons, and two prebendaries. Here is an office of revenue, conducted by an accomptant and treasurer; one of whom, as I have already observed, resides at Lambayeque. Convents of several orders are established here; a college of Jesuits, an hospital of Our Lady of Bethlehem, and two nunneries, one of the order of St. Clare, and the other of St. Teresa.

The inhabitants consist of Spaniards, Indians, and

all the other casts. Among the former are several very rich and distinguished families. All in general are very civil and friendly, and regular in their conduct. The women in their dress and customs follow nearly those of Lima, an account of which will be given in the sequel. Great number of chaises are seen here, there not being a family of any credit without one; as the sandy soil is very troublesome in walking.

In this climate, there is a sensible difference between winter and summer, the former being attended with cold, and the latter with excessive heat. The country of this whole valley is extremely fruitful, abounding with sugar canes, maize, fruits, and garden stuff; and with vineyards and olive yards. The parts of the country nearest the mountains produce wheat, barley, and other grain; so that the inhabitants enjoy not only a plenty of all kinds of provisions, but also make considerable exports to Panama, especially of wheat and sugars. This remarkable fertility has been improved to the great embellishment of the country; so that the city is surrounded by several groves, and delightful walks of trees. The gardens also are well cultivated, and make a very beautiful appearance; which with a continual serene sky, prove not less agreeable to travellers than to the inhabitants.

About a league from the city is a river, whose waters are conducted by various canals, through this delightful country. We forded it on the 4th when we left Truxillo; and on the 5th, after passing through Moche, we came to Biru, ten leagues from Truxillo. The pass of the corregidor of Truxillo must be produced to the alcade of Moche, for without this, as before at Sechura, no person would be admitted to continue his journey.

Biru, which lies in 8° 24′ 59″ S. latitude, consists of 50 baxarcque houses, inhabited by 70 families of Spaniards, Indians, Mulattoes, and Mestizos.

About

About half a league to the northward of it, is a rivulet, from which are cut several trenches, for watering the grounds. Accordingly the lands are equally fertile with those of Truxillo, and the same may be said of the other settlements farther up the river. This place we left the same day, travelling sometimes along the shore, sometimes at a league distance from it.

On the 6th we halted in a desart place called Tambo de Chao, and afterwards came to the banks of the river Santa; which having passed by means of the Chimbadores, we entered the town of the same name, which lies at about a quarter of a league from it, and 15 from Biru. The road being chiefly over vast sandy plains intercepted between two hills.

The river Santa, at the place where it is usually forded, is near a quarter of a league in breadth, forming five principal streams, which run during the whole year with great rapidity. It is always forded, and for this purpose persons make it their business to attend with very high horses, trained up to stem the current, which is always very strong. They are called Chimbadores; and must have an exact knowledge of the fords, in order to guide the loaded mules in their passage, as otherwise the fording this river would be scarce practicable, the floods often shifting the beds of the river; so that even the Chimbadores themselves are not always safe; for the fords being suddenly changed in one of the streams, they are carried out of their depth by the current, and irretrievably lost. During the winter season, in the mountains, it often swells to such a height, as not to be forded for several days, and the passengers are obliged to wait the fall of the waters, especially if they have with them any goods; for those who travel without baggage may, by going six or eight leagues above the town, pass over it on balzas made of calabashes: though even here not without danger, for if the balza happens

happens to meet any strong current, it is swept away by its rapidity, and carried into the sea. When we forded it, the waters were very low, notwithstanding which, we found from three several experiments made on its banks, that the velocity of the current was 35 toises in $29\frac{1}{2}$ seconds: so that the current runs 4271 toises, or a league and a half, in an hour. This velocity does not indeed equal what M. de la Condamine mentions in the narrative of his voyage down the river Maragnon, or that of the Amazones, at the Pango, or streight of Manceriche. But, doubtless when the river of Santa is at its usual height, it exceeds even the celerity of the Pango; at the time of making our observations, it was at its lowest.

The latitude of the town of Santa Miria de la Parrilla, for so it is called, we determined by an observation of some stars, not having an opportunity of doing it by the sun, and found it 8° 57′ 36′ S. It was first built on the sea coast, from which it is now something above half a league distant. It was large, populous, the residence of a Corregidor, and had several convents. But in 1685, being pillaged and destroyed by the above-mentioned English adventurer, its inhabitants abandoned it, and such as were not able to remove to a place of greater security, settled in the place where it now stands. The whole number of houses in it at present does not exceed thirty; and of these the best are only of baxareque, and the others of straw. These houses are inhabited with about 50 poor families consisting of Indians, Mulattoes, and Mestizos.

During our observations, we were entertained with a sight of a large ignited exhalation, or globe of fire in the air, like that mentioned in the first volume of this work, though not so large, and less effulgent. Its direction was continued for a considerable time towards the west, till having reached the sea coast, it disappeared with an explosion like that of cannon. Those

who

who had not seen it were alarmed, and imagining it to be a cannon fired by some ship arrived in the port, ran to arms, and hastened on horseback to the shore, in order to oppose the landing of the enemy. But finding all quiet, they returned to the town, only leaving some sentinels to send advice, if any thing extraordinary should happen. These igneous phænomena are so far from being uncommon all over Valles, that they are seen at all times of the night, and some of them remarkably large, luminous, and continuing a considerable time.

This town and its neighbourhood are terribly infested with moschitos. There are indeed some parts of the year when their numbers decrease, and sometimes, though very seldom, none are to be seen; but they generally continue during the whole year. The country from Piura upwards is free from this troublesome insect, except some particular towns, situated near rivers; but they swarm no where in such intolerable numbers as at Santa.

Leaving this town on the 8th, we proceeded to Guaca-Tambo, a plantation so called, eight leagues distant from Santa, and contiguous to it is the Tambo, an inn built by the Yncas for the use of travellers. It has a shed for the convenience of passengers, and a rivulet running near it.

On the 9th we came to another plantation known by the name of Manchan, within a league of which we passed through a village called Casma la Baxa, having a church, with not more than ten or twelve houses. Half way betwixt this and Manchan is another rivulet. The latter plantation is about eight leagues distant from the former. From Manchan on the tenth we travelled over those stony hills called the Culebras, extremely troublesome, particularly to the litters, and on the following day being the 11th, we entered Guarmey, 16 leagues from Manchan; and after travelling about three leagues further we reached

the

the Pascana, or resting place, erected instead of a tambo or inn, and called the Tambo de Culebras. The town of Guarmey is but small and inconsiderable, consisting only of 40 houses, and these no better than the preceding. They are inhabited by about 70 families, few of which are Spaniards. Its latitude is 10° 3′ 53″ S. The corregidor has obtained leave to reside here continually, probably to be free from the intolerable plague of the moschitos at Santa, where formerly was his residence.

On the 13th we proceeded from hence to a place called Callejones, travelling over 13 leagues of very bad road, being either sandy plains, or craggy eminences. Among the latter is one, nor a little dangerous, called Salto del Frayle, or the Friar's leap. It is an entire rock, very high, and, towards the sea, almost perpendicular. There is however no other way, though the precipice cannot be viewed without horror; and even the mules themselves seem afraid of it by the great caution with which they take their steps. On the following day we reached Guamanmayo, a hamlet at some distance from the river Barranca, and belonging to the town of Pativirca, about eight leagues from the Callejones. This town is the last in the jurisdiction of Santa or Guarmey.

Patavirca consists only of 50 or 60 houses, and a proportional number of inhabitants: among whom are some Spanish families, but very few Indians. Near the sea coast, which is about three quarters of a league from Guamanmayo, are still remaining some huge walls of unburnt bricks; being the ruins of an ancient Indian structure; and its magnitude confirms the tradition of the natives, that it was one of the palaces of the ancient caseques, or princes; and doubtless its situation is excellently adapted to that purpose, having on one side a most fertile and delightful country, and on the other, the refreshing prospect of the sea.

On

On the 15th we proceeded to the banks of the river Barranca, about a quarter of a league distant. We easily forded it, under the direction of Chimbadores. It was now very low, and divided into three branches, but being full of stones is always dangerous. About a league further is the town of Barranca, where the jurisdiction of Guaura begins. The town is populous, and many of its inhabitants Spaniards, though the houses do not exceed 60 or 70. The same day we reached Guaura, which from Guamaumayo makes a distance of nine leagues.

This town consists only of one single street, about a quarter of a league in length, and contains about 150 or 200 houses; some of which are of bricks, others of baxareques: besides a few Indian huts.

This town has a parish church, and a convent of Franciscans. Near it you pass by a plantation, extending above a league on each side of the road, which is every where extremely delightful; the country eastward, as far as the eye can reach, being covered with sugar-canes, and westward divided into fields of corn, maize, and other species of grain. Nor are these elegant improvements confined to the neighbourhood of the town, but the whole valley, which is very large, makes the same beautiful appearance.

At the south end of the town of Guaura, stands a large tower, with a gate, and over it, a kind of redoubt. This tower is erected before a stone bridge, under which runs Guaura river: and so near to the town that it washes the foundations of the houses, but without any damage, being a rock. From the river is a suburb which extends above half a league, but the houses are not contiguous to each other; and the groves and gardens with which they are intermixed, render the road very pleasant. By a solar observation, we found the latitude of Guaura to be 11° 3′ 36″ S. The sky is clear, and the temperature

perature of the air healthy and regular. For though it is not without a sensible difference in the seasons, yet the cold of the winter, and the heats of summer, are both easily supportable.

In proceeding on our journey from Guarmey we met with a great many remains of the edifices of the Yncas. Some were the walls of palaces; others, as it were large dykes, by the sides of spacious highways; and others fortresses, or castles, properly situated for checking the inroads of enemies. One of the latter monuments stands about 2 or 3 leagues north of Pativirca, not far from a river. It is the ruins of a fort, and situated on the top of an eminence at a small distance from the sea; but the vestiges only of the walls are now remaining.

From Guaura we came to the town of Chancay; and though the distance between this is reckoned only twelve leagues, we concluded, by the time we were travelling, it to be at least fourteen. From an observation we found its latitude 11° 33′ 47″ S. The town consists of about 300 houses, and Indian huts; is very populous, and among other inhabitants can boast of many Spanish families, and some of distinguished rank. Besides its parish church, here is a convent of the order of St. Francis, and an hospital chiefly supported by the benevolence of the inhabitants. It is the capital of the jurisdiction of its name, and belongs to that of Guaura. The Corregidor, whose usual residence is at Chancay, appoints a deputy for Guaura. The adjacent country is naturally very fertile, and every where well watered by canals cut from the river Passamayo, which runs about a league and a half to the southward of the town. These parts are every where sowed with maize, for the purpose of fattening hogs, in which article is carried on a very considerable trade; the city of Lima being furnished from hence.

We left Chancay the 17th; and after travelling a league

a league beyond the river Passamayo, which we forded, arrived at the tambo of the same name, situated at the foot of a mountain of sand, exceeding troublesome, both on account of its length, steepness, and difficulty in walking; so that it is generally passed in the night, the soil not being then so fatiguing.

From thence on the 18th we reached Tambo de Ynca, and after travelling 12 leagues from the town of Chancay, we had at length the pleasure of entering the city of Lima.

From the distances carefully set down during the whole course of the journey, it appears that from Tumbez to Piura is 62 leagues, from Piura to Truxillo 89, and from Truxillo to Lima 113; in all 264 leagues. The greatest part of this long journey is generally performed by night; for the whole country being one continued sand, the reflection of the sun's rays is so violent, that the mules would be overcome by the heat; besides the want of water, herbage, and the like. Accordingly the road all along, is rather distinguished by the bones of the mules which have sunk under their burdens, than by any track or path. For notwithstanding they are continually passing and re-passing throughout the whole year, the winds quickly efface all the prints of their feet. This country is also so bare, that when a small herb or spring happens to be discovered, it is a sure sign of being in the neighbourhood of houses. For these stand near rivers, the moisture of which fertilizes these arid wastes, so that they produce that verdure not to be seen in the uninhabited parts: as they are such merely from their being destitute of water; without which no creature can subsist, nor any lands be improved.

In the towns we met with plenty of all necessary provisions; as flesh, fowl, bread, fruits, and wine; all extremely good, and at a reasonable price; but the

the traveller is obliged to dress his meat himself, if he has not servants of his own to do it for him; for in the greatest parts of the towns he will not meet with any one, inclinable to do him that piece of service, except in the larger cities where the masters of inns furnish the table. In the little towns, the inns, or rather lodging houses, afford nothing but shelter; so that travellers are not only put to the inconvenience of carrying water, wood and provisions, from one town to another, but also all kinds of kitchen utensils. Besides tame fowl, pigeons, peacocks and geese, which are to be purchased in the meanest towns, all cultivated parts of this country abound in turtle doves, which live intirely on maize and the seeds of trees, and multiply exceedingly; so that shooting them is the usual diversion of travellers while they continue in any town; but except these, and some species of small birds, no others are to be had during the whole journey. On the other hand, no ravenous beasts, or venomous reptiles, are found here.

The distribution of waters by means of canals, which extend the benefit of the rivers to distant parts of the country, owes its origin to the royal care and attention of the Yncas; who among other marks of their zeal for promoting the happiness of their subjects, taught them by this method, to procure from the earth, whatever was necessary either for their subsistance, or pleasure. Among these rivers, many are entirely dry or very low, when the waters cease to flow from the mountains; but others, as those of Santa Baranca, Guaura, Passamayo, and others, continue to run with a full stream during the greatest drought.

The usual time when the water begins to increase in these rivers is the beginning of January or February, and continues till June, which is the winter among the mountains; and, on the contrary, the summer

summer in Valles; in the former it rains, while in the latter the sun darts a violent heat, and the south winds are scarce felt. From June the waters begin to decrease, and in November or December the rivers are at their lowest ebb, or quite dry; and this is the winter season in Valles, and the summer in the mountains. So remarkable a difference is there in the temperature of the air, though at so small a distance.

CHAP. III.

Account of the City of Lima, the Capital of Peru.

FORTUITOUS events may sometimes, by their happy consequences, be classed among premeditated designs. Such was the unforeseen cause which called us to Peru; for otherwise the history of our voyage would have been deprived of a great many remarkable and instructive particulars; as our observations would have been limited to the province of Quito. But by this invitation of the vice-roy of Peru, we are now enabled to lead the reader into that large and luxuriant field, the fertile province of Lima, and the splendid city of that name, so justly made the capital of Peru, and the queen of all the cities in South America. It will also appear that our work would have suffered a great imperfection, and the reader consequently disappointed in finding no account of those magnificent particulars, which his curiosity had doubtless promised itself, from a description of this famous city, and an accurate knowledge of the capital province. Nor would it have been any small mortification to ourselves, to have lost the opportunity of contemplating those noble objects, which so greatly increase the value of our work, though already enriched with such astronomical observations

observations and nautical remarks, as we hope will prove agreeable to the intelligent reader. At the same time it opens a method of extending our researches into the other more distant countries, for the farther utility and ornament of this voyage; which, as it was founded on the most noble principles, should be conducted and closed with an uniform dignity.

My design however is not to represent Lima in its present situation, as I should then, instead of noble and magnificent objects, introduce the most melancholy and shocking scenes; ruinated palaces, churches, towers, and other stately works of art, together with the inferior buildings of which this opulent city consisted, now thrown into ruin and confusion, by the tremendous earthquake of October the 28th, 1746; the affecting account of which reached Europe with the swiftness which usually attends unfortunate advices, and concerning which, we shall be more particular in another place. I shall not therefore describe Lima, as wasted by this terrible convulsion of nature; but as the emporium of this part of *America*, and endeavour to give the reader an idea of its former glory, magnificence, opulence, and other particulars which rendered it so famous in the world, before it suffered under this fatal catastrophe; the recollection of which cannot fail of being painful to every lover of his country, and every person of humanity.

The city of Lima, or as it is also called the city of the kings, was, according to Garcilaso, in his history of the Yncas, founded by Don Francisco Pizarro, on the feast of the Epiphany, 1535; though others affirm that the first stone was not laid till the 18th of January that year; and the latter opinion is confirmed by the act, or record of its foundation, still preserved in the archives of that city. It is situated in the spacious and delightful valley of Rimac, an Indian word, and the true name of the city itself, from a corrupt pronunciation of which word the Spaniards

PLAN of LIMA.

Scale of Toises.
100 200.

The PORT of CALLAO.

River of Lima
Road to Lima
Anconi
Wolf Islands
1. Callao.
2. Lima.
El Corrobado
Fryenton
Isle of St. Laurence
Scale of Toises.

1. The Llama or Peruvian Sheep
2. Vicoyn.
3. The Huanaco.
4. The Calash used at Lima.
5. A Mestico woman on horseback.
6. A Lady of Lima.
7. A Spaniard in the Peruvian dress.
8. A Lady of Lima in a riding dress.
9. A Mulatto woman and a Negro servant.

Neele sculp. Strand.

have derived Lima. Rimac is the name by which both the valley and the river are still called. This appellation is derived from an idol to which the native Indians used to offer sacrifice, as did also the Yncas, after they had extended their empire hither; and as it was supposed to return answer to the prayers addressed to it, they called it by way of distinction Rimac, or, he who speaks. Lima, according to several observations we made for that purpose, stands in the latitude of 12° 2′ 31″ S. and its longitude from the meridian of Teneriffe is 299° 27′ 7½″. The variation of the needle is 9° 2′ 30″ easterly.

Its situation is one of the most advantageous that can be imagined; for being in the centre of that spacious valley, it commands the whole without any difficulty. Northward, though at a considerable distance, is the cordillera, or chain of the Andes; from whence some hills project into the valley, the nearest of which to the city are those of St. Christopher, and Amancaes. The perpendicular height of the former, according to a geometrical mensuration performed by Don George Juan, and M. de la Condamine in 1737, is 134 toises; but father Feuillée makes it 136 toises and one foot, which difference doubtless proceeds from not having measured with equal exactness, the base on which both founded their calculations. The height of the Amancaes, is little less than the former, and situated about a quarter of a league from the city.

The river, which is of the same name, washes the walls of Lima, and when not increased by the torrents from the mountains is easily forded; but at other times, besides the increase of its breadth, its depth and rapidity render fording impossible; and accordingly a very elegant and spacious stone bridge is built over it, having at one end a gate, the beautiful architecture over which is equal to the other parts of this useful structure. This gate forms the entrance into the city, and leads to the grand square, which

which is very large and finely ornamented. In the centre is a fountain, equally remarkable for its grandeur and capacity. In the centre is a bronze statue of Fame, and on the angles are four small basons. The water is ejected through the trumpet of the statue, and also through the mouths of eight lions which surround it, and greatly heighten the beauty of this work. The east side of the square is filled by the cathedral and the archiepiscopal place, whose height surpasses the other buildings in the city. Its principal foundations, and the bases of its columns and pilasters, together with the capital front which faces the west, are of freestone; the inside resembles that of Seville, but not so large. The outside is adorned with a very magnificent façade or frontispice, rising into two lofty towers, and in the centre is the grand portal. Round the whole runs a grand gallery, with a balustrade of wood, resembling brass in colour, and at proper distances are several pyramids, which greatly augment the magnificence of the structure. In the north side of the square is the vice-roy's palace, in which are the several courts of justice, together with the offices of revenue, and the state prison. This was formerly a very remarkable building, both with regard to its largeness and architecture, but the greatest part of it being thrown down by the dreadful earthquake with which the city was visited, Oct. 20th, 1687, it now consists only of some of the lower apartments erected on a terras, and is used as the residence of the vice-roy and his family.

On the west side which faces the cathedral, is the council-house, and the city prison; the south side is filled with private houses, having only one story; but the fronts being of stone, their uniformity, porticoes, and elegance, are a great embellishment to the square, each side of which is 80 toises.

The form of the city is triangular, the base, or longest side, extending along the banks of the river.

Its length is 1920 toises, or exactly two-thirds of a league. Its greatest breadth from N. to S. that is, from the bridge to the angle opposite to the base, is 1080 toises, or two-fifths of a league. It is surrounded with a brick wall, which answers its original intention, but is without any manner of regularity. This work was begun and finished by the duke de la Plata in the year 1685. It is flanked with 34 bastions, but without platforms or embrasures; the intention of it being merely to inclose the city, and render it capable of sustaining any sudden attack of the Indians. It has, in its whole circumference, seven gates and three posterns.

ON the side of the river opposite to the city is a suburb, called St. Lazaro, which has, within these few years, greatly increased. All the streets of this suburb, like those of the city, are broad, parallel, or at right angles, some running from N. to S. and others from E. to W. forming squares of houses, each 150 yards in front, the usual dimensions of all these quadras or squares in this country, whereas those of Quito are only 100. The streets are paved, and along them run streams of water, conducted from the river a little above the city; and being arched over contribute to its cleanliness, without the least inconveniency.

THE houses, though for the most part low, are commodious, and make a good appearance. They are all of baxareque and quincha. They appear indeed to be composed of more solid materials, both with regard to the thickness of the principal walls, and the imitation of cornices on them; and that they may the better support themselves under the shocks of earthquakes, of which this city has had so many dreadful instances, the principal parts are of wood, mortised into the rafters of the roof, and those which serve for walls are lined both within and without with wild canes, and chaglias or osiers; so that the timber-work is totally inclosed. These osiers

are plaistered over with clay, and whitewashed, but the fronts painted in imitation of free-stone. They afterwards add cornices and porticos which are also painted as a stone colour. Thus the whole front imposes on the sight, and strangers suppose them to be built of those materials which they only imitate. The roofs are flat, and covered only so far as is necessary to keep out the wind and intercept the rays of the sun. The pieces of timber, of which the roofs are formed, and which on the inside are decorated with elegant mouldings and other ornaments, are covered with clay to preserve them from the sun. This slender covering is sufficient, as no violent rains are ever known here. Thus the houses are in less danger than if built of more compact materials; for the whole building yields to the motions of the earthquakes, and the foundations which are connected with the several parts of the building follow the same motion; and by that means are not so easily thrown down.

The wild canes, which serve for the inner parts of the walls, resemble in length and bigness those known in Europe, but without any cavity. The wood of them is very solid, and little subject to rot. The chaglla is also a kind of shrub growing wild in the forests and on the banks of rivers. It is strong and flexible like the osier. These are the materials of which the houses in all the towns of Valles mentioned in the preceding chapter, are built.

Towards the east and west parts of the city, but within the walls, are a great many fruit and kitchen gardens; and most of the principal houses have gardens for entertainment, being continually refreshed with water by means of the canals.

The whole city is divided into the five following parishes. 1. Sagrario, which has three priests. 2. St. Ann, and 3. St. Sebastian, each having two priests. 4. St. Marcelo, and 5. St. Lazaro, each of which has one priest only. The parish of the latter extends itself

self five leagues, namely, to the valley of Carabaillo, and to it belong the many large plantations in that space; chapels are therefore erected for celebrating mass on days of precept, that the people may perform their duty without the fatigue and trouble of travelling to Lima. Here are also two chapels of ease: that of St. Salvador in the parish of St. Ann; and that of the orphans, in the Sagrario. There is also in the Cercado, one of the quarters of the town, a parish of Indians, under the care of the Jesuits.

The convents here are very numerous; four Dominicans, viz. La Casa grande, Recolleccion de la Magdalena, the college of St. Thomas appropriated to literature, and Santa Rosa. Three of Franciscans, viz. Casa grande, Recoletos de nuestra Senora de los Angeles, or Guadalupe, and Los Descalzos de San Diego: the latter is in the suburb of San Lazaro. Three of the order of Augustin, namely, Casa grande; the seminary of San Ildefonso, a literary college; and the noviciate at Nuestra Senora de Guia. Three also belong to the order of Mercy, namely, the Casa principal, the college of St. Pedro Nolasco, and a Recolleccion, called Bethlehem.

The Jesuits have six colleges or houses, which are those of St. Paul, their principal college; St. Martin, a college for secular students; St. Anthony, a noviciate; the house of possession, or desamparados, under the invocation of Nuestra Senora de los Dolores; a college in the Circado, where the Indians are instructed in the precepts of religion; and that of the Chacarilla, appointed for the exercises of St. Ignatius; and accordingly all seculars on their desire to perform them are admitted. They are also allowed the liberty of beginning when most convenient for themselves, and are handsomely entertained by the college during the eight days of their continuance. But it must be observed, that of all these convents, the Casas grandes are now the most

considerable; the others, besides being small, have but few members, and small revenues.

Besides the preceding nineteen convents and colleges, here are also an oratory of St. Philip Neri; a monastery of the order of St. Benedict, with the title of Nuestra Senora de Monserrat, the abbé of which is commonly the only member, and sent from Spain; and though this foundation is one of the most ancient in the whole city, its revenue is hardly sufficient to support any more: a convent called Nuestra Senora de la Buena Muerte, or the order of that name, generally known by the name of Agonizantes. This order founded an hospital in the city, in 1715, under the particular direction of the fathers Juan Mugnos, and Juan Fernandez, who with a lay brother of the same order having in 1736 obtained a licence from the council of the Indians, went from Spain and founded a convent of community in every form. In the suburb of St. Lazaro is also a convent of St. Francis de Paula, a modern foundation, under the name of Nuestra Senora del Scorro.

There are also in Lima three other charitable foundations, namely: St. Juan de Dios, served by the religious of that order, and appropriated to the relief of persons recovering from sickness; and two of Bethlemites; one of which, being the Casa grande, is without the city, and founded for the relief of sick Indians, who are taken care of in Santa Anna; and the other within the city, called that of the incurables, being appropriated to persons labouring under diseases of that nature. The latter, as we have already observed,* was founded so early as the year 1671. This opulent city has also nine other hospitals, each appropriated to some peculiar charity.

1. San Andres, a royal foundation admitting only spaniards.

* Chap. IV. Lib. V. Vol. I.

2. San

2. San Pedro, for poor ecclesiastics.

3. El Espiritu Santo, for mariners, and supported by the ships belonging to these seas, their crews being properly assessed for that purpose.

4. St. Bartholome, for the negroes.

5. Senora Santa Anna, for the Indians.

6. San Pedro de Alcantara, for women.

7. Another for that use, under the care of the Bethlemite fathers, erected before their Casa grande.

8. La Caridad, also for women.

9. San Lazaro, for the lepers, which with those already enumerated, make twelve.

Here are also 14 nunneries, the number of persons in which would be sufficient to people a small town. The 5 first are regulars, and the other 9 recollects.

1. La Encarnation. 2. La Conception. 3. Santa Cathalina. 4. Santa Clara. 5. La Trinidad. 6. El Carmen. 7. Santa Teresa, ò El Carmen baxo. 8. Las Descalzas de San Joseph. 9. Las Capuchinas. 10. Las Nazarenas. 11. Las Mercidarias. 12. Santa Rosa. 13. Las Trinitarias Descalzas. 14. Las Monjas del Prado.

Lastly, Here are four other conventual houses, where some few of the sisters are not recluses, though most of them observe that rule. These houses are :

1. Santa Rosa de Viterbo. 2. Nuestra Senora del Patrocinio. 3. Nuestra Senora de Capacabana, for Indian ladies. 4. San Joseph.

The last is a retreat for women who desire to be divorced from their husbands. There is also a house constituted in the manner of convents, for poor women, and under the direction of an ecclesiastic appointed by the archbishop, who is also their chaplain.

The most numerous of all these nunneries, are the Incarnation, Conception, Santa Clara, and Santa Cathalina. The others are indeed not so large ; but the Recollects, in the rectitude and austerity of their lives, are an example to the whole city.

Here is also an orphan-house, divided into two colleges, one for the boys, and the other for the girls: besides several chapels, in different parts of the city; but the following list will shew at once, the parishes, hospitals, churches and monasteries of Lima; which was always no less conspicuous with regard to a zeal for religion than for splendour.

List of the parishes, convents of each order, hospitals, nunneries, and conventual houses in Lima.

Parishes 6.

Convents of San Domingo, 4. Of San Francis, 3. Of San Augustin, 3. Of la Merced, 3.

Colleges of Jesuits, 6.

Oratory of St. Philip Neri, 1.

Monastery of Benedictins, 1. Of San Francisco de Paula, 1. Of Agonizantes, 1. Of San Juan de Dios, 1. Of Bethlemites, 2.

Nunneries of Regulars, 5. Of Recollets, 9.

Conventual House, 4. Houses for poor women, 1. Orphan house, 1. Hospitals, 12.

All the churches, both conventual and parochial, and also the chapels, are large, constructed partly of stone, and adorned with paintings and other decorations of great value; particularly the cathedral, the churches of St. Dominic, St. Francis, St. Augustin, the fathers of Mercy, and that of the Jesuits, are so splendidly decorated, as to surpass description; an idea being only to be formed by the sight. The riches and pomp of this city, especially on solemn festivals, are astonishing. The altars, from their very bases to the borders of the paintings, are covered with massive silver, wrought into various kinds of ornaments. The walls also of the churches are hung with velvet, or tapestry of equal value, adorned with gold and silver fringes: all which in this country is remarkably dear; and on these are splendid pieces of plate in various figures. If the eye be directed from the

the pillars, walls, and ceiling, to the lower part of the church, it is equally dazzled with glittering objects, presenting themselves on all sides: among which are candlesticks of massive silver, six or seven feet high, placed in two rows along the nave of the church; embossed tables of the same metal, supporting smaller candlesticks; and in the intervals betwixt them pedestals on which stand the statues of angels. In fine, the whole church is covered with plate, or something equal to it in value; so that divine service, in these churches, is performed with a magnificence scarce to be imagined; and the ornaments, even on common days, with regard to their quantity and richness, exceed those which many cities of Europe pride themselves with displaying on the most common occasions.

If such immense riches are bestowed on the body of the church, how can imagination itself form an idea of those more immediately used in divine worship, such as the sacred vessels, the chalices, ostensoriums, &c. in the richness of which there is a sort of emulation between the several churches? In these the gold is covered with diamonds, pearls, and precious stones, so as to dazzle the eye of the spectator. The gold and silver stuff for vestments and other decorations, are always of the richest and most valuable among those brought over by the register ships. In fine, whatever is employed in ornamenting the churches, is always the richest of the kind possible to be procured.

The principal convents are very large, with convenient and airy apartments. Some parts of them, as the outward walls which inclose them, are of unburnt bricks; but the building itself of quinchas or baxareques. The roofs of many are arched with brick, others only with quinchas; but of such curious architecture as entirely to conceal the materials; so that the frontispieces and principal gates have a majestic appearance. The columns, friezes, statues and cornices

are

are of wood, finely carved, but so nearly imitating the colour and appearance of stone, as only to be discovered by the touch. This ingenious imitation does not proceed from parsimony, but necessity; in order to avoid as much as possible the dreadful devastations of earthquakes, which will not admit of structures built with ponderous materials.

The churches are decorated with small cupolas of a very pretty appearance: and though they are all of wood, the sight cannot distinguish them from stone. The towers are of stone from the foundation the height of a toise and a half, or two toises, and from thence to the roof of the church of brick, but the remainder of wood painted of a free-stone colour, terminating in a statue, or image alluding to the name of the church. The height of these may be nearly known from that of St. Dominic, which by a geometrical mensuration we found to be between 50 and 60 yards; a height which though small in proportion to the largeness of the structure, is a necessary caution both with regard to the shocks of earthquakes, and the weight of the bells, which in size and number exceed those of Spain, and on a general ringing produce a very agreeable harmony.

All the convents are furnished with water from the city, though not from that of the rivulets, which as we before observed, run through the streets in covered channels; but brought from a spring by means of pipes. While on the other hand, both the monasteries and nunneries are each obliged to maintain a fountain in the street, for the public use of poor people, who have not the conveniency of water in their houses.

The viceroys, whose power extends over all Peru, usually reside at Lima: but the province and audience of Quito has been lately detached from it; as we have observed in our account of that province. This government is triennial, though at the expiration

of

of that term the sovereign may prolong it. This office is of such importance, that the viceroy enjoys all the privileges of royalty. He is absolute in all affairs whether political, military, civil, criminal, or relating to the revenue, having under him offices and tribunals for executing the several branches of government; so that the grandeur of this employment is in every particular equal to the title. For the safety of his person and the dignity of his office, he has two bodies of guards; one of horse, consisting of 160 private men, a captain, and a lieutenant: their uniform is blue, turned up with red, and laced with silver. This troop consists entirely of picked men, and all Spaniards. The captain's post is esteemed very honourable. These do duty at the principal gate of the palace; and when the viceroy goes abroad, he is attended by a piquet guard consisting of eight of these troopers. The 2d is that of the halberdiers, consisting of 50 men, all Spaniards, dressed in a blue uniform, and crimson velvet waistcoasts laced with gold. These do duty in the rooms leading to the chamber of audience, and private apartments. They also attend the viceroy when he appears in public, or visits the offices and tribunals. The only officer of this body is a captain, whose post is also reckoned very eminent. Both captains are nominated by the viceroy. Besides these there is another guard within the palace, consisting of 100 private men, a captain, lieutenant, and sub-lieutenant; being a detachment from the garrison of Callao. These are occasionally employed in executing the governor's orders, and the decrees of the tribunals, after they have received the sanction of his assent.

The viceroy, besides assisting at the courts of justice, and the councils relating both to the finances and war, gives every day public audience to all sorts of persons; for which purpose there are in the palace, three very grand and spacious rooms. In the first,

first, which is adorned with the portraits of all the viceroys, he receives the Indians and other casts. In the second, he gives audience to the Spaniards; and in the third, where under a rich canopy are placed the pictures of the king and queen then reigning, he receives those ladies who desire to speak to him in private without being known.

The affairs relating to the government are expedited by a secretary of state, with an assistant, properly qualified for such an arduous post. From this office are issued the orders for passports, which must be had from every corregidor in his jurisdiction. The secretary has also the power of filling all juridical employments as they become vacant, for the term of two years; as also those of the magistracy, who at the expiration of their term have not been replaced by others of his majesty's nomination. In a word, this office may be said to be the channel by which all affairs relating both to war and government are transacted.

All causes relating to justice, are tried in the court called the *audiencia*, from the decrees of which there is no appeal to the supreme council of the Indies, unless after notorious injustice or a second trial; as the viceroy himself presides in it. The audiencia, which is the chief court at Lima, is composed of 8 auditors or judges, and a fiscal for civil causes. This court is held in the viceroy's palace, in the 3 saloons appropriated to it. In one the deliberations are held, and in the other two, the causes are tried either publicly or privately, the senior judge always presiding. Criminal causes are tried in a 4th apartment, the judges being 4 alcaldes of the court, and a criminal fiscal. There is also a fiscal protector of the Indians, and some supernumeraries.

Next to the tribunal of audience, is the chamber of accounts, consisting of a commissioner; five chief accomptants, two receivers, and two directors, with other

other inferior officers belonging to each class. Here all corregidors, intrusted to collect the revenue, pass their accounts. Here also the distributions and managements of the royal revenue are regulated.

Lastly, the royal treasury, under a treasurer, accomptant, and agent, who have the superintendance of all his majesty's revenue of what kind soever; since whatever revenue arises from the other parts of this province is remitted to Lima as the capital of the kingdom.

The corporation of Lima, consists of regidores or aldermen, and alfere zreal, or sheriff; and two alcaldes, or royal judges; all being noblemen of the first distinction in the city. These have the direction of the police, and the ordinary administration of justice. The alcaldes preside alternately every month; for by a particular privilege of this city, the jurisdiction of its corregidor extends only to the Indians.

Here is a court for the effects of deceased persons, which takes cognizance of the goods of those dying intestate, and without lawful heir; and likewise of those entrusted with the effects of other persons. It consists of a judge, who is generally one of the auditors, a counsellor, and an accomptant.

The next tribunal is that of commerce, or the consulado. Its principal officers are a president and two consuls. All who are entered in the list of merchants are members of it, and have a vote in the choice of these officers, who, with an assessor, decide all commercial disputes and processes, by the same rules as the consulados at Cadiz and Bilboa.

Lima has also a corregidor, whose jurisdiction extends to all Indians both within the city and five leagues round it. The principal places in this jurisdiction are Surco, Los Chorillos, Miraflores, la Magdalena, Lurigancho, Late, Pachacama, and Lurin, together with the Indian inhabitants of the two suburbs of Callao, called new and old Pitipiti. The

infinite

infinite number of Indians who inhabited this valley before and at the time of the conquest, are now reduced to the few inhabitants of the above-mentioned places; and have only two casiques, namely, those of Miraflores and Sureo, and these in such low circumstances as to teach music at Lima for subsistence.

The cathedral chapter, besides the archbishop, consists of the dean, archdeacon, chanter, treasurer, and rector, four canons by suffrage, five by presentation, six prebendaries, and six semi-prebendaries; but the ecclesiastical tribunal consists only of the archbishop and his chancellor. His suffragans are the bishops of Panama, Quito, Truxillo, Guamanga, Arequipa, Cuzco, St. Jago, and Conception; the two last are in the kingdom of Chili.

The tribunal of Inquisition consists of two inquisitors and a fiscal, who like the subordinate officers are nominated by the inquisitor general; and in case of a vacancy, filled up by the supreme council of the inquisition.

The tribunal of the Cruzada, is conducted by a sub-delegate commissary, an accomptant, and treasurer, with other inferior officers. But the dean or senior judge of the audience, generally assists at its deliberations.

Lastly, here is also a mint with its proper officers, where gold and silver are coined.

In the university and colleges, the happy geniuses of the natives are improved by divine and human learning, and as we shall shew in the sequel, soon give elegant specimens of their future acquisitions. They are in this much more indebted to nature than either to art or to their own application; and if they do not equally distinguish themselves in other studies, it is not for want of talents, but of proper persons to instruct them in the necessary elements. For by their ready comprehension of whatever is taught them, we may conclude, that their abilities

are

are equal to other improvements. The chief of these seminaries is the university of St. Mark, and the colleges of St. Toribio, St. Martin, and St. Philip. In the former are chairs for all the sciences, and filled by suffrage; a method always favourable for persons of learning and understanding. Some of these professors have, notwithstanding the vast distance, gained the applause of the literati of Europe.

THE university makes a stately appearance without, and its inside is decorated with suitable ornaments. It has a large square court, with a handsome vaulted piazza round it. Along the sides are the halls, where lectures are read; and in one of its angles is the theatre for the public acts, adorned with the portraits of the several great men who had their education in this seat of learning, in frames finely ornamented with sculpture, and richly gilded; as are also the two rows of seats which extend entirely round the theatre.

FROM what has been said it sufficiently appears, that Lima is not only large, magnificent, and distinguished, as the capital of the kingdom, by the residence of the viceroy, and the superior courts and offices, but also that it has an acknowledged superiority over the other cities in these parts from the public nurseries erected for the advancement of learning and the sciences.

THE richness of the churches, and the splendour with which divine service is performed, we have already described. The magnificence of its inhabitants and of its public solemnities are proportional, and displayed with a dignity peculiar to minds inflamed with a desire of honour, and who value themselves on celebrating the principal solemnities in a manner which distinguishes Lima from the other cities of its kingdom: though the latter are not wanting in their endeavours to vie with their capital.

OF all the solemnities observed in America, the public

public entrance of the viceroy is the most splendid; and in which the amazing pomp of Lima is particularly displayed. Nothing is seen but rich coaches and calashes, laces, jewels, and splendid equipages, in which the nobility carry their emulation to an astonishing height. In a word, this ceremony is so remarkable, that I flatter myself the reader will not be displeased at the description.

CHAP. IV.

Of the Public Entrance of the Viceroy at Lima; his Reception, and the chief annual Solemnities.

ON the landing of the viceroy at Paita, two hundred and four leagues from Lima, he sends a person of great distinction, generally some officer of his retinue, to Lima, with the character of an ambassador; and, by a memoir, informs his predecessor of his arrival, in conformity to his majesty's orders, who had been pleased to confer on him the government of that kingdom. On this ambassador's arrival at Lima, the late viceroy sends a messenger to compliment him on his safe arrival,; and on dismissing the ambassador, presents him with some jewel of great value, and a jurisdiction or two which happen at that time to be vacant, together with an indulgence of officiating by deputy, if most agreeable to him. The corregidor of Piura receives the new viceroy at Paita, and provides litters, mules, and every other necessary for the viceroy and his retinue, as far as the next jurisdiction. He also orders booths to be built at the halting-places in the deserts; attends him in person, and defrays all the expences, till relieved by the next corregidor. Being at length arrived at Lima, he proceeds, as it were incognito,

through

through the city to Callao, about two leagues and a half distant. In this place he is received and acknowledged by one of the ordinary alcaldes of Lima, appointed for that purpose, and also by the military officers. He is lodged in the viceroy's palace, which on this occasion is adorned with astonishing magnificence. The next day, all the courts, secular and ecclesiastical, wait on him from Lima, and he receives them under a canopy in the following order. The audiencia, the chamber of accounts, the cathedral chapter, the magistracy, the consulado, the inquisition, the tribunal de Cruzada, the superiors of the religious orders, the colleges, and other persons of eminence. On this day the judges attend the viceroy to an entertainment given by the alcalde; and all persons of note take a pride in doing the like to his attendants. At night there is a play, to which the ladies are admitted veiled, and in their usual dress, to see the new viceroy.

The second day after his arrival at Callao, he goes in a coach provided for him by the city, to the chapel de la Legua, so called from its being about half-way between Callao and Lima, where he is met by the late viceroy, and both alighting from their coaches, the latter delivers to him a truncheon as the ensign of the government of the kingdom. After this, and the usual compliments, they separate.

If the new viceroy intends to make his public entry into Lima in a few days, he returns to Callao, where he stays till the day appointed; but as a longer space is generally allowed for the many preparatives necessary to such a ceremony, he continues his journey to Lima, and takes up his residence in his palace, the fitting up of which on this occasion is committed to the junior auditor, and the ordinary alcalde.

On the day of public entry, the streets are cleaned, and hung with tapestry, and magnificent triumphal arches erected at proper distances. At two in the

afternoon the viceroy goes privately to the church belonging to the monastery of Montserrat, which is separated by an arch and a gate from the street, where the cavalcade is to begin. As soon as all who are to assist in the procession are assembled, the viceroy and his retinue mount on horses, provided by the city for this ceremony, and the gates being thrown open, the procession begins in the following order:

The militia; the colleges; the university with the professors in their proper habits; the chamber of accompts; the audiencia on horses with trappings; the magistracy, in crimson velvet robes, lined with brocade of the same colour, and a particular kind of caps on their heads, a dress only used on this occasion. Some members of the corporation who walk on foot, support the canopy over the viceroy; and the two ordinary alcaldes, which are in the same dress, and walk in the procession, act as equerries, holding the bridle of his horse. This part of the ceremony, though prohibited by the laws of the Indians, is still performed in the manner I have described; for the custom being of great antiquity, the magistrates have not thought proper to alter it, that the respect to the viceroy might not suffer any diminution, and no person has yet ventured to be the first in refusing to comply with it.

This procession is of considerable length, the viceroy passing through several streets till he comes to the great square, in which the whole company draw up facing the cathedral, where he alights, and is received by the archbishop and chapter. Te Deum is then sung before the viceroy, and the officers placed in their respective seats; after which he again mounts his horse and proceeds to the palace-gate, where he is received by the audiencia, and conducted to an apartment in which a splendid collation is provided, as are also others for the nobility in the antichambers.

On the morning of the following day, he returns to

to the cathedral in his coach, with the retinue and pomp usual in solemn festivals, and public ceremonies. He is preceded by the whole troop of horse-guards, the members of the several tribunals in their coaches, and after them the viceroy himself with his family, the company of halberdiers bringing up the rear. On this occasion all the riches and ornaments of the church are displayed; the archbishop celebrates in his pontifical robes the mass of thanksgiving; and the sermon is preached by one of the best orators of the chapter. From hence the viceroy returns to the palace attended by all the nobility, who omit nothing to make a splendid figure on these occasions. In the evening of this, and the two following days, the collations are repeated, with all the plenty and delicacy imaginable. To increase the festivity, all women of credit have free access to the halls, galleries, and gardens of the palace, when they are fond of shewing the dispositions of their genius, either by the vivacity of repartees, or spirited conversations, in which they often silence strangers of very ready wit.

THIS shew and ceremony is succeeded by bull-feasts at the city's expence, which continue five days; the three first for the viceroy, and the two latter in compliment to the ambassador who brought advice of his arrival, and the great honour conferred on him by the sovereign in the government of this kingdom.

THIS ambassador, who, as I before observed, is always a person of eminent quality, makes also a public entrance into Lima on horseback on the day of his arrival, and the nobility being informed of his approach, go out to receive and conduct him to the palace, from whence they carry him to the lodgings prepared for him. This ceremony used to be immediately followed by feasts and public diversions; but in order to avoid that inconvenience, just when the city is every where busied in preparing for the re-

ception of the viceroy, they are deferred, and given at one and the same time as above recited.

The bull-feasts are succeeded by that ceremony, in which the university, the colleges, the convents and nunneries acknowledged him as their viceroyal protector. This is also accompanied with great splendour; and valuable prizes are bestowed on those who make the most ingenious compositions in his praise. These ceremonies, which greatly heighten the magnificence of this city, are so little known in Europe, that I shall be excused for enlarging on them.

They are begun by the university, and the rector prepares a poetical contest, adapted to display either the wit or learning of the competitors. After publishing the themes, and the prizes to be given to those who best handle the subjects they have chosen, he waits on the viceroy to know when he will be pleased to honour the university with his presence; and, the time being fixed, every part of the principal court is adorned with the utmost magnificence. The prizes which are placed in order distinguish themselves by their richness, while the pillars and columns are hung with emblematical devices, or pertinent apothegms on polished shields, surrounded by the most beautiful mouldings.

The reception is in the following order. On the viceroy's entering the court he is conducted to the rectorial chair, which, on this occasion, glitters with the magnificence of an Eastern throne. Opposite to it sits the rector, or, in his absence, one of the most eminent members of that learned body, who makes a speech, in which he expresses the satisfaction the whole university feels in such a patron. After this the viceroy returns to his palace, where, the day following, the rector presents him with a book, containing the poetical contest, bound in velvet, and plated at the corners with gold, accompanied with some elegant

elegant piece of furniture, whose value is never less than eight hundred or a thousand crowns.

THE principal end of the university in this ceremony being to ingratiate itself with the viceroy and his family, the rector contrives that the poetical pieces which gain the prizes, be made in the name of the principal persons of his family, and accordingly the most distinguished prizes are presented to them; and there being 12 subjects in the contest, there are three prizes for each, of which the two inferior fall to those members, whose compositions are most approved of. These prizes are pieces of plate, valuable both for their weight and workmanship.

THE university is followed by the colleges of St. Philip and St. Martin, with the same ceremonies, except the poetical contest.

NEXT follow the religious orders, according to the antiquity of their foundation in the Indies. These present to the viceroy the best theses maintained by students at the public acts.

THE viceroy is present at them all, and each disputant pays him some elegant compliment, before he enters on his subject.

THE superiors of the nunneries send him their congratulatory compliments, and when he is pleased in return to visit them, they entertain him with a very fine concert of musick, of which the vocal parts are truly charming: and at his retiring they present him with some of the chief curiosities which their respective institutes allow to be made by them.

BESIDES these festivities and ceremonies, which are indeed the most remarkable; there are also others, some of which are annual, in which the riches and liberality of the inhabitants are no less conspicuous. Particularly on new-year's day, at the election of alcaldes, who being afterwards confirmed by the viceroy, appear publickly on horseback the same evening, and ride on each side of him, in very magnificent habits ornamented with jewels, and the furniture of their horses

perfectly answerable. This cavalcade is very pompous, being preceded by the two companies of horse-guards, the halberdiers, followed by the members of the tribunals in their coaches, the viceroy's retinue, and the nobility of both sexes.

On twelfth-day in the morning, and the preceding evening, the viceroy rides on horseback through the town, with the royal standard carried in great pomp before him. This is performed in commemoration of the building of the city, which, as we have already observed, was begun on this day; solemn vespers are sung in the cathedral, and a mass celebrated; and the ceremony is concluded with a cavalcade, like that on new-year's day.

The alcaldes chosen for the current year, give public entertainments in their houses, each three nights successively; but that the feasts of one might not interfere with those of another, and occasion resentments, they agree for one to hold his feasts the three days immediately succeeding the election, and the other on twelfth-day and the two following. Thus each has a great number of guests, and the entertainments are more splendid and sumptuous. The other feasts in the course of the year, are not inferior to these either with regard to numbers or expence; at least the number of them must excite a high idea of the wealth and magnificence of Lima

CHAP. V.

Of the Inhabitants of Lima.

HAVING, in our accounts of several towns through which we passed to Lima, included also the inhabitants, we shall observe the same rule with regard to Lima; for though amidst such an infinite variety of customs, there is always some resemblance between those of neighbouring people, yet the difference is also considerable, and no where more so than on this continent, where it doubtless arises from the great distance between

between the several towns; and, consequently, I may say, from the different geniuses and dispositions of the people. And though Lima is the capital of the country, it will appear that it is not a model to other places, with regard to dress, customs, and manner of living.

The inhabitants of Lima are composed of whites, or Spaniards, Negroes, Indians, Mestizos, and other casts, proceeding from the mixture of all three.

The Spanish families are very numerous; Lima according to the lowest computation, containing sixteen or eighteen thousand whites. Among these are reckoned a third or fourth part of the most distinguished nobility of Peru; and many of these dignified with the stile of ancient or modern Castilians, among which are no less than 45 counts and marquises. The number of knights belonging to the several military orders is also very considerable. Besides these are many families no less respectable and living in equal splendour; particularly 24 gentlemen of large estates, but without titles, though most of them have ancient seats, a proof of the antiquity of their families. One of these traces, with undeniable certainty, his descent from the Yncas. The name of this family is Ampuero, so called from one of the Spanish commanders at the conquest of this country, who married a Coya, or daughter of the Ynca. To this family the kings of Spain have been pleased to grant several distinguishing honours and privileges, as marks of its great quality: and many of the most eminent families in the city have desired intermarriages with it. All those families live in a manner becoming their rank, having estates equal to their generous dispositions, keeping a great number of slaves and other domestics, and those who affect making the greatest figure have coaches, while others content themselves with calashes or chaises, which are here so common, that no family of any substance is without one. It must be owned that these carriages are more

necessary

necessary here than in other cities, on account of the numberless droves of mules which continually pass through Lima, and cover the streets with their dung, which being soon dried by the sun and the wind, turns to a nauseous dust, scarce supportable to those who walk on foot. These chaises, which are drawn by a mule, and guided by a driver, have only two wheels, with two seats opposite to each other, so that on occasion they will hold four persons. They are very slight and airy; but on account of the gildings and other decorations, sometimes cost eight hundred or a thousand crowns. The number of them is said to amount to 5 or 6000; and that of coaches is also very considerable, though not equal to the former. The funds to support these expences, which in other parts would ruin families, are their large estates and plantations, civil and military employments, or commerce, which is here accounted no derogation to families of the greatest distinction; but by this commerce is not to be understood the buying and selling by retail or in shops, every one trading proportional to his character and substance. Hence families are preserved from those disasters too common in Spain, where titles are frequently found without a fortune capable of supporting their dignity. Commerce is so far from being considered as a disgrace at Lima, that the greatest fortunes have been raised by it; those on the contrary, being rather despised, who not being blessed with a sufficient estate, through indolence, neglect to have recourse to it for improving their fortunes. This custom, or resource, which was established there without any determinate end, being introduced by a vain desire of the first Spaniards to acquire wealth, is now the real support of that splendour in which those families live; and whatever repugnance these military gentlemen might originally have to commerce, it was immediately removed by a royal proclamation, by which it was declared that commerce in the Indies should not exclude from

from nobility or the military orders; a very wise measure, and of which Spain would be still more sensible, were it extended to all its dependencies.

AT Lima, as at Quito, and all Spanish America, some of the eminent families have been long since settled there, whilst the prosperity of others is of a later date; for being the centre of the whole commerce of Peru, a greater number of Europeans resort to it, than to any other city; some for trade, and others from being invested in Spain with considerable employments: among both are persons of the greatest merit; and though many after they have finished their respective affairs, return home, yet the major-part, induced by the fertility of the soil, and the goodness of the climate, remain at Lima, and marry young ladies remarkable equally for the gifts of fortune as those of nature; and thus new families are continually settled.

THE Negroes, Mulattoes, and their descendants, form the greater number of the inhabitants; and of these are the greatest part of the mechanics; though here the Europeans also follow the same occupations, which are not at Lima reckoned disgraceful to them, as they are at Quito; for gain being here the universal passion, the inhabitants pursue it by means of any trade, without regard to its being followed by Mulattoes, interest here preponderating against any other consideration.

THE third, and last class of inhabitants, are the Indians and Mestizos, but these are very small in proportion to the largeness of the city, and the multitudes of the second class. They are employed in agriculture, in making earthenware, and bringing all kinds of provisions to market, domestick services being performed by Negroes and Mulattoes, either slaves or free, though generally by the former.

THE usual dress of the men differs very little from that worn in Spain, nor is the distinction between the several classes very great; for the use of all sorts of cloth being allowed, every one wears what he can purchase.

purchase. So that it is not uncommon to see a mulatto, or any other mechanic, dressed in a tissue equal to any thing that can be worn by a more opulent person. They all greatly affect fine cloaths, and it may be said without exaggeration, that the finest stuffs made in countries, where industry is always inventing something new, are more generally seen at Lima than in any other place; vanity and ostentation not being restrained by custom or law. Thus the great quantities brought in the galleons and register ships notwithstanding they sell here prodigiously above their prime cost in Europe, the richest of them are used as cloaths, and worn with a carelessnes little suitable to their extravagant price; but in this article the men are greatly exceeded by the women, whose passion for dress is such as to deserve a more particular account.

In the choice of laces, the women carry their taste to a prodigious excess; nor is this an emulation confined to persons of quality, but has spread through all ranks, except the lowest class of negroes. The laces are sewed to their linen, which is of the finest sort, though very little of it is seen, the greatest part of it, especially in some dresses, being always covered with lace; so that the little which appears seems rather for ornament than use. These laces too must be all of Flanders manufacture, no woman of rank condescending to look on any other.

Their dress is very different from the European, which the custom of the country alone can render excusable; indeed to Spaniards at their first coming over it appears extremely indecent. Their dress consists of a pair of shoes, a shift, a petticoat of dimity, an open petticoat, and a jacket, which in summer is of linen, in winter of stuff. To this, some add a mantelette, that the former may hang loose. The difference between this dress and that worn at Quito, though consisting of the same pieces, is, that at Lima it is much shorter, the petticoat, which is usually tied

below

below the waist, not reaching lower than the calf of the leg, from whence, nearly to the ancle, hangs a border of very fine lace, sewed to the bottom of the under petticoat; through which the ends of their garters are discovered, embroidered with gold or silver, and sometimes set with pearls; but the latter is not common. The upper petticoat, which is of velvet, or some rich stuff, is fringed all round, and not less crowded with ornaments than those described in the first volume of this work. But be the ornaments what they will, whether of fringe, lace, or ribands, they are always exquisitely fine. The shift sleeves, which are a yard and a half in length, and two yards in width, when worn for ornament, are covered with rolls of laces, variegated in such a manner as to render the whole truly elegant. Over the shift is worn the jacket, the sleeves of which are excessively large, of a circular figure, and consist of rows of lace, or slips of cambrick or lawn with lace disposed betwixt each, as are also the shift sleeves, even of those who do not affect extraordinary ornament. The body of the jacket is tied on the shoulders with ribands fastened to the back of their stays; and the round sleeves of it being tucked up to the shoulders, are so disposed together with those of the shift, as to form what may be termed four wings. If the jacket be not buttoned or clasped before, it is agreeably fastened on the shoulders; and indeed the whole dress makes a most elegant figure. They who use a close vest, fasten it with clasps, but wear over it the loose jacket already described. In the summer they have a kind of veil, the stuff and fashion of which is like that of the shift and body of the vest, of the finest cambrick or lawn, richly laced: but in winter the veil worn in their houses is of bays; when they go abroad full dressed, it is adorned like the sleeves. They also use brown bays, finely laced and fringed, and bordered

 with

with slips of black velvet. Over the petticoat is an apron of the same stuff as the sleeves of the jacket, hanging down to the bottom of it. From hence some idea may be formed of the expence of a dress, where the much greater part of the stuff is merely for ornament; nor will it appear strange, that the marriage shift should cost a thousand crowns, and sometimes more.

One particular on which the women here extremely value themselves, is the size of their feet, a small foot being esteemed one of the chief beauties; and this is the principal fault they find with the Spanish ladies, who have much larger feet than those of Lima. From their infancy they are accustomed to wear strait shoes, that their feet may not grow beyond the size which they esteem beautiful; some of them do not exceed five inches and a half, or six inches in length, and in women of a small stature they are still less. Their shoes have little or no sole, one piece of cordovan serving both for that and the upper leather, and of an equal breadth and roundness at the toe and heel, so as to form a sort of long figure of 8; but the foot not complying with the figure, brings it to a greater regularity. These shoes are always fastened with diamond buckles, or something very brilliant in proportion to the ability of the wearer, being worn less for use than ornament; for the shoes are made in such a manner, that they never loosen of themselves, nor do the buckles hinder their being taken off. It is unusual to set these buckles with pearls, a particular to be accounted for only from their being so lavish of them in the other ornaments of dress, as to consider them as of too little value. The shoemakers, who are no strangers to the foible of the sex, take great care to make them in a manner very little calculated for service. The usual price is three half-crowns a pair; those embroidered with gold or silver cost from eight to ten crowns. The latter, however, are but

but little worn, the encumbrance of embroidery being suited rather to enlarge than diminish the appearance of a small foot.*

They are fond of white silk stockings, made extremely thin, that the leg may appear the more shapely; the greatest part of which is exposed to view. These trifles often afford very sprightly sallies of wit in their animadversions on the dress of others.

Hitherto we have considered only the more common dress of these ladies; the reader will conceive a still higher idea of their magnificence, when he is informed of the ornaments with which they are decorated in their visits, and upon public occasions. We shall begin with their manner of dressing the hair, which being naturally black, and capable of reaching below their waists, they dispose in such a manner as to appear perfectly graceful. They tie it up behind in six braided locks, through which a golden bodkin a little bent is inserted, and having a cluster of diamonds at each end. On this the locks are suspended so as to touch the shoulder. On the front and upper part of the head they wear diamond aigrets, and the hair is formed into little curls, hanging from the forehead to the middle of the ear, with a large black patch of velvet on each temple. Their ear-rings are of brilliants, intermixed with tufts of black silk, covered with pearls, resembling those already described in the first volume. These are so common an ornament, that besides their necklaces, they also wear about their neck rosaries, the beads of which are of pearls, either separate or set in clusters to the size of a large filbert; and those which form the cross are still larger.

Besides diamond rings, necklaces, girdles, and

* All those who can afford them wear shoes made in the European manner, but with heels of wrought silver; the tinkling of which, added to the smallness of their feet, has really, at least to the weather-beaten sailor, something captivating. A.

bracelets, all very curious both with regard to water and size, many ladies wear other jewels set in gold, or for singularity's sake, in tombago. Lastly, from their girdle before is suspended a large round jewel enriched with diamonds; much more superb than their bracelets, or other ornaments. A lady covered with the most expensive lace instead of linen, and glittering from head to foot with jewels, is supposed to be dressed at the expence of not less than thirty or forty thousand crowns; a splendour still the more astonishing, as it is so very common.

A fondness for expence in these people, does not confine itself to rich apparel; it appears no less in the strange neglect, and the small value, they seem to set upon them, by wearing them in a manner the most careless, and by that means bringing upon themselves fresh expences in repairing the old or purchasing new jewels; especially pearls, on account of their fragility.

The most common of the two kinds of dresses worn when they go abroad, is the veil and long petticoat; the other is a round petticoat and mantelet: the former for church, the latter for taking the air, and diversions; but both in the prevailing taste for expence, being richly embroidered with silver or gold.

The long petticoat is particularly worn on Holy Thursday; as on that day they visit the churches, attended by two or three female negro or mulatto slaves, dressed in an uniform like pages.*

* The lower class of women, whose whole stock of apparel seldom consists of more than two camisas [shifts] and a saya [petticoat], wear bracelets, rosaries, and small golden images about their necks and arms, to the intrinsic value of 50 or 60 crowns, and to them of much greater value, having cost near that sum in benediction from the priests, without which the images, &c. would be esteemed pollations. A

With

With regard to the persons of the women of Lima, they are, in general, of a middling stature, handsome, genteel, and of very fair complexions without the help of art; the beauty of their hair has been already mentioned, but they have usually an enchanting lustre and dignity in their eyes.

These personal charms are heightened by those of the mind: clear and comprehensive intellects; an easiness of behaviour, so well tempered, that whilst it invites love, it commands respect; the charms of their conversation are beyond expression; their ideas just, their expressions pure, their manner inimitably graceful. These are the allurements by which great numbers of Europeans, forgetting the fair prospects they have at home, are induced to marry and settle here.

One material objection against them is, that being too well acquainted with their own excellences, they are tainted with a haughtiness, which will scarce stoop to the will of their husbands. Yet by their address and insinuating compliance, they so far gain the ascendancy over them, as to be left to their own discretion. There may, indeed, a few exceptions be found; but these possibly are rather owing to a want of capacity. Another objection may be made to their being more expensive than other ladies: but this arises from the exorbitant price of stuffs, laces, and other commodities, in this country. And with regard to the independance they affect, it is no more than a custom long established in the country. To which may be added, that being natives, and their husbands generally foreigners, it is very natural, that the latter should not enjoy all that authority, founded on laws superior to custom; and hence this error remains uncorrected. The husbands conform to the manners of the country, as their character is not in the least affected thereby; and this complaisance is rewarded by the discretion and affection

tion of their ladies, which are not to be paralleled in any other part of the world.

They are so excessively fond of perfumes, that they always carry ambergrise about them; putting it behind their ears, and other parts of the body; and also in several parts of their cloaths. Not content with the natural fragrancy of flowers, which are also a favourite ornament, they scatter perfumes even on their nosegays. The most beautiful flowers they place in their hair, and others which are most valuable for their odour they stick in their sleeves; the effluvia therefore issuing from these ladies, the reader will conceive to reach to no inconsiderable distance. The flower most in use is the chirimoya, of mean appearance, but of exquisite scent.

To this passion for flowers it is owing, that the grand square, every morning, on account of the vast quantity of beautiful vegetables brought thither, has the appearance of a spacious garden. The smell and the sight are there sufficiently gratified. The ladies resort thither in their calashes, and if their fancy happens to be pleased, they make but little difficulty with regard to the price. A stranger has the pleasure of seeing assembled here not only the ladies, but every body of rank whose health and avocations will admit of it.

The lower classes of women, even to the very negroes, affect, according to their abilities, to imitate their betters, not only in the fashion of their dress, but also in the richness of it. None here are seen without shoes as at Quito, but they are made of so small a size, in order to diminish the natural bigness of the feet, that they must give infinite uneasiness in the wearing. A desire of being distinguished by an elegant dress is universal. Their linen is always starched to a great degree, in order to display the costly patterns of their laces. After this universal passion, their next care, and indeed a much more com-

commendable one, is cleanliness; of which the uncommon neatness of their houses are sufficient instances.

They are naturally gay, sprightly, and jocose, without levity; remarkably fond of musick; so that even among the lowest you are entertained with pleasing and agreeable songs; for the gratification of this passion, they have in general good voices, and some of them are heard with admiration. They are very fond of balls, where they distinguish themselves equally by the gracefulness and agility of their motions. In fine, the reigning passions of the fair at Lima, are shew, mirth, and festivity.

The natural vivacity and penetration of the inhabitants of Lima, both men and women, are greatly improved by conversing with persons of learning resorting thither from Spain. The custom of forming small assemblies, has also a great tendency to improve their minds, and give them a ready and happy manner of expression, from an emulation to distinguish themselves in these engaging accomplishments.

Though the natives have too great a share of pride, they are not wanting in docility when proper methods are taken. They instantly shew their reluctance to obey a command given with haughtiness; but, when delivered with mildness and affability, equally obsequious and submissive. They are charmed with gentleness of manners; and a few instances of kindness make a lasting impression on their minds. They are remarkably brave, and of such unblemished honour, as never to dissemble an affront received, or give one to others; so that they live together in a chearful and social manner. The Mulattoes being less civilized, and having but slender notions of the turpitude of vice, and the importance of virtue, are haughty, turbulent, and quarrelsome. Yet the mischievous consequences of these vices are

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less common, than might naturally be expected in such a populous city.

The manners and dispositions of the nobility correspond with their rank and fortune. Courtesy shines in all their actions, and their complaisance to strangers is without limits. The reception they give them, is equally free from flattery and a haughty reserve; so that all the Europeans, whether they visit them out of curiosity or from commercial motives, are charmed with their probity, politeness, candour, and magnificence.

CHAP. VI.

Of the Climate of the City of Lima, and the whole Country of Valles:—and the Divisions of the Seasons.

THE temperature of the air of Lima, and its alterations, would be greatly injured by an inference drawn from what is felt in the same degree of north latitude; as Lima would from thence be concluded another Carthagena; the latitude of both cities, one in the northern and the other in the southern hemisphere, differing but very little; whereas in fact it is quite the reverse. For as that of Carthagena is hot to a degree of inconvenience, this of Lima is perfectly agreeable. And though the difference of the four seasons are sensible, all of them are moderate, and none of them troublesome.

Spring begins towards the close of the year, that is, towards the end of November, or beginning of December. But this is to be understood only of the heavens, as then the vapours which filled the atmosphere during the winter subside, the sun to the great

great joy of the inhabitants again appears, and the country now begins to revive, which during the absence of his rays had continued in a state of languor. This is succeeded by summer, which, though hot from the perpendicular direction of the sun's rays, is far from being insupportable; the heat, which would indeed otherwise be excessive, being moderated by the south winds, which at this season always blow, though with no great force. At the latter end of June, or the beginning of July, the winter begins, and continues till November or December, the autumn intervening between both. About this time the south winds begin to blow stronger, and bring the cold with them; not indeed equal to that in countries where snow and ice are known, but so keen that the light dresses are lain by, and cloth or other warm stuffs worn.

There are two causes of the cold felt in this country, and nature, wise in all her ways, provides others which produce the same effect at Quito. The first cause of cold at Lima is the winds, which passing over the frozen climes of the south pole, bring hither part of the frigorific particles from those gelid regions; but as a sufficient quantity of these could not be brought over such an immense space as lies between the frozen and torrid zones of its hemisphere, nature has provided another expedient; during the winter, the earth is covered with so thick a fog, as totally to intercept the rays of the sun; and the winds, by being propagated under the shelter of this fog, retain the particles they contracted in the frozen zone. Nor is this fog confined to the country of Lima: it extends, with the same density, northward through all the country of Valles, at the same time filling the atmosphere of the sea; as will be shewn hereafter.

This fog seldom fails daily to cover the earth, with a density that obscures objects at any distance. About 10 or 11 it begins to rise, but without being totally dispersed, though it is then no impediment to the

sight, intercepting only the rays of the sun by day, and by night those of the stars, the sky being continually covered whatever height the vapours float in the atmosphere. Sometimes, indeed, they are so far dispersed as to admit of seeing the disk of the sun, but still precluding the heat of his rays.

It is not unworthy observation on this head, that at the distance of only two or three leagues, the vapours are much more dissipated from noon to evening than in the city, the sun fully appearing so as to moderate the coldness of the air. Also at Callao, which is only two leagues and a half from Lima, the winter is much more mild, and the air clearer, during that season; for the days at Lima are very melancholy and disagreeable, not only on account of the darkness, but frequently during the whole day the vapours continue in the same degree of density and position, without breaking, or being elevated above the earth.

It is in this season only that the vapours dissolve into a very small mist or dew, which they call garua, and thus every where equally moistens the earth; by which means all those hills, which during the other part of the year offer nothing to the sight but rocks and wastes, are cloathed with verdure, and enamelled with flowers of the most beautiful colours, to the great joy of the inhabitants, who, as soon as the severity of winter is abated, resort into the country, which exhibits so elegant an appearance.* These garuas or dews never fall in quantities sufficient to damage the roads, or incommode the traveller; a

* I cannot understand what the Author means here by "severity of the winter," unless he would so denominate the most pleasant time of the year; for during this time, while the sun's rays are cut off by the mists, there is a continual spring; and plants and herbs recruit their strength to endure the perpendicular rays of the sun, which break through the mists about the middle of November. A.

very

very thin stuff will not soon be wet through; but the continuance of the mists during the whole winter without being exhaled by the sun, renders the most arid and barren parts fertile. For the same reason they turn the disagreeable dust in the streets of Lima into a mud, which is rather more offensive.

The winds which prevail during the winter, are nearly, though not exactly, south; sometimes shifting a little to the S. E. between which and the south they always blow.* This we observed to have constantly happened during the two winters we spent in this country, one at Lima, and the other at Callao; the former in the year 1742, and the latter in 1743. The first was one of the most severe that had been felt, and the cold general in all that part of America to Cape Horn. In Chili, Baldivia, and Chiloe, the cold was proportionable to the latitudes; and at Lima it occasioned constipations and fluxions, which swept away such numbers that it seemed to resemble a pestilence. And though disorders of this kind are very common in the winter season, they are rarely attended with the danger which then accompanied them.

The extraordinary singularity observed in the kingdom of Peru, namely, that it never rains; or to speak more properly, that the clouds do not convert themselves into formal showers, has induced many naturalists to enquire into the cause: but in their solutions of this difficulty they have varied, and invented several hypotheses to account for so strange an effect. Some attribute it to the constancy of the south winds, concluding, that as they are incessant, they propel the vapours rising from the sea, to the same point; and thus by never resting in any part, as no opposite winds blow during the whole year

* The wind here blows S. by E. to S. by W. but generally about S. S. E. from June to December. A.

to check their course, there is not time sufficient for the mists to collect themselves, and, by an increase of gravity, to descend in the manner of rain. Others have attributed it to the natural cold brought by the south wind, which continue the atmosphere in a certain degree of heat during the whole year, and thus increase the magnitude of the particles of the air, which with the nitrous effluvia acquired in its passage over the surface of the sea, together with those of the several minerals with which this country abounds, lessen its velocity, and consequently its power of uniting the vapours so as to form drops whose gravity is greater than that of the air. To this we may add, that the rays of the sun not exerting a force sufficient for uniting and putting them in motion, the heat being greatly lessened by the coldness of the wind, the fog cannot be converted into drops of rain. For while the weight of the cloud does not exceed that of the air, by which it is supported, it cannot precipitate.

I shall not censure this, or any other hypothesis, formed for explaining the above phænomenon, not being certain that I have myself discovered the true cause; I shall however give the reader my thoughts, and leave them to the discussion of philosophers. In order to this I shall lay down some preliminary principles, which may serve as a foundation to those who shall apply themselves to discover the true cause of this phænomenon, with some instructions for judging of the several hypotheses that have been formed on this extraordinary subject.

1. It is to be supposed, that throughout the whole country of Valles, no other winds are known during the whole year, than the southerly, that is, between the S. and S. E. and this not only on the land, but also to a certain distance at sea; it evidently appearing that the winds are limited between the S. and S. E. It is therefore very strange that some writers

writers should assert that they are confined between the S. and S. W. as this is absolutely false. There are indeed intervals when these winds are scarce felt, and an air, though extremely small, seems to come from the north, and which forms the fog. 2. In winter the S. wind blows harder than in summer, especially near the surface of the earth. 3. Though no formal rain is ever known in the country of Valles, there are wetting fogs called garuas, which continue the greatest part of the winter; but are never seen in summer. 4. When the garuas fall, it is observed that the clouds, mist, or vapours, which rise from the earth, remain almost contiguous to its surface; and the same fog which is converted into a garua, begins by a moist air, till the humidity gradually increasing to its greatest condensation, the small drops which fall are easily distinguishable. This is so natural, that it is known in all other countries subject to any degree of cold, and, consequently, not to be wondered at in this.

I GIVE the name of cloud, mist, or vapours, to that which produces the garua or small rain; for though there may be some accidental distinctions between these three kinds, they are not such as cause any material difference: the fog being only the vapour condensed more than when it first rose; and the cloud only a fog elevated to a greater height, and still more condensed than the former: so that in reality they may all be considered as one and the same thing, differing only in degrees of density, and therefore it is of little importance whatever name it is called by.

5. THE rays of the sun during the summer, cause a prodigious heat all over Valles, and the more so as they are received upon a sandy soil, whence they are strongly reverberated, the winds being at the same time very weak. Hence it appears, that the second hypothesis above related, is not founded

on

on truth; for if the force or agitation of the south winds be the cause which hinders the vapours from rising to the height necessary for forming rain, this cause generally ceasing in the summer, the rain might be expected to descend; whereas quite the reverse happens, the garuas being then much less common. 6. Particular times have been known when the nature of the country departing as it were from its usual course, formal showers have fallen, as we have already mentioned (chap i.) in describing the towns of Chocope, Truxillo, Tumbez, and other places; but with this singularity, that the winds continued at south, and blew much stronger during the time of the rain, than is usual either in winter or summer.

These six preliminary principles are so common to this climate, that they may be applied to all the places mentioned in this chapter; and are the only guides that must be followed in determining the true cause why it does not rain in Peru as in Europe, or, more properly, as is common in the torrid zone.

It will readily be granted, that the wind blows more strongly in some regions of the atmosphere than in others; experience itself having sufficiently proved this to be fact; as on high mountains, along whose summits a strong wind is felt, when at the foot hardly any can be perceived; at least we found this to be the case in all the mountains of the Cordilleras, one of the greatest inconveniences to us being the strength of the wind. And indeed this is every where so common, that any person may be convinced of it by only ascending a high tower, then he will soon perceive the difference between the strength of the wind at the top and at the bottom. I am not ignorant that some have endeavoured to prove, that on the land this proceeds from the inequalities of its surface, which hinder the winds from blowing in the plains or low countries with that force which is felt on eminences; but the same thing happening at sea,

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as experience has abundantly proved, it appears beyond dispute, that the surface is not the place where the wind exerts its greatest force. This being granted, it may be confidently asserted, that the south winds blow with the greatest force in a portion of the atmosphere at some distance from the earth; but not generally higher than that in which the rain is formed; or where the aqueous particles unite so as to form drops of any sensible gravity or magnitude. In this country therefore the clouds or vapours elevated above this space, that is, those which have the greatest degree of altitude, move with a much less velocity than the winds under them. Nor is it uncommon in other climates, besides that of Valles, for these clouds to move in a direction contrary to the more dense ones below it. Thus it appears to me, that without the danger of advancing irregular suppositions, the space of the atmosphere, where the winds generally blow with the greatest force, is that where the large drops commonly called rain are formed.

Now in order to explain the singularity of this remarkable phænomenon, I conceive that in summer, when the atmosphere is most rarefied, the sun by the influence of his rays, proportionally elevates the vapours of the earth and gives them a greater degree of rarefaction; for his beams being then in a more perpendicular direction to the earth, they have the power of raising them to a greater height. These vapours on their touching the lower part of the atmosphere, where the winds blow with the geratest force, are carried away before they can rise to the height required for uniting into drops, and consequently no rain can be formed. For as the vapours issue from the earth, they are wafted along the lower region of the atmosphere, without any stop; and the winds blowing always from the south, and the vapours being rarefied proportionally to the heat of the sun, its

its too great activity hinders them from uniting. Hence in summer the atmosphere is clear, or free from vapours.

In winter the rays of the sun being less perpendicular to the surface of the earth, the atmosphere becomes considerably more condensed, but the winds from the south much more so, as being loaded with the frigorific particles from the frozen zone, which particles it communicates to the vapours as they issue from the earth: and consequently renders them much more condensed than in summer: hence they are hindered from rising with the same celerity as before.

To these must be added two other reasons; one, that the rays of the sun for want of sufficient activity dissipates the vapours less, so that they rise much slower. The other, that the region where the wind has its greatest velocity being, in this season, near the earth, will not admit of their rising to any height; and thus they continue contiguous to its surface, where they still follow the same direction, and form the moist fog then felt: and having less space to dilate themselves than at a greater height, they, consequently, sooner come into contact, and when sufficiently condensed, descend in a guara.

In the middle of the day the garua ceases, being then dispersed, which proceeds from sun's rarefying the atmosphere, whence the vapours ascend and remain suspended at a greater height, and thus they are rendered more tenuious; and being raised to a region where they have more room to dilate, they are so far dispersed as to become imperceptible.

After all, it must be owned that both in summer and winter, some vapours must surmount the difficulty of the wind in that region where its velocity is greatest, and getting above it ascend to a greater height; though not indeed in the very part where they first reached this current of wind, but at

at some distance from it; so that these vapours are to be considered, on one hand, as yielding to the current of the air, and on the other, as ascending in proportion to the rarefaction they have received from the rays of the sun. Hence it follows, that these vapours cannot be those which are most condensed, as the difficulty of rising is always proportional to the degree of condensation; and at the same time their magnitude would render them more susceptible of the impulse of the wind. So that these consequently being the most subtile or tenuious, on having passed that region, the celerity with which they were before carried upwards is decreased, and great numbers of them being united, form that lofty mist which is seen after the cloud is totally dissipated. This mist cannot be converted into rain; for having passed above the region proper for its formation, all the parts become congealed, and their weight can never be increased sufficiently to overcome the resitance of the air which supports them; for the quantity of those which have overcome this obstacle being inconsiderable, they cannot be united with a sufficient quantity of others to withstand the continual dissipation occasioned by the action of the rays of the sun. Nor can they descend in either snow or hail, as might be expected from their present state. Besides following always, though with less velocity, the current of the wind, any such concretion of them as to form a thick cloud is prevented: for as we have already observed, these mists are so tenuious, as to afford in the day-time a confused view of the disk of the sun, and of the stars in the night.

In order to render the premises agreeable to observation, one difficulty still remains, namely, that those lofty mists are seen only in winter, and not in summer. But this, in my opinion, must naturally be the consequence; for besides the general reason that the stronger influence of the rays of the sun disperses

perses them, it proceeds from the increase of the force of the winds during the winter, in a region nearer the earth than in summer; and the nearer the lower part of this region is to the surface of the earth, the nearer also will be the upper part; while, on the contrary, in the summer, the higher the lower part of this current of air is, the higher will be also its upper part; and, as we must suppose, with all philosophers, that the vapours of the earth can ascend only to that height, where the gravity of the particles of the vapours are equal to those of the air; and the rapidity of the wind extending in summer to these limits, they are consequently involved in its violent impulse; and thence there cannot be such a multitude of conglomerations as to form the mist so common in winter; for the winds in this season strongly blowing through a region nearer the earth, the agitation in the upper parts is proportionally less. And this current of air being below the region to which vapours can ascend, the space intercepted between the upper part of this current, and the part to which vapours rise, becomes filled with them. All this seems natural, and is confirmed by experience; for in winter the south winds are stronger on the land than in summer. But as a further proof may be thought necessary, I have added the following.

It has been said that in the town of Chocope, two very hard and continual rains have happened; and that the same thing is more frequently seen at Tumbez, and other towns of those parts, after some years of continual drought, which seems strange; for that being in the country of Valles, and not at all different from Lima, no rain would naturally be expected there. Two causes for this, however, have occurred to me, one of them flowing from the other. I shall begin with the first as productive of the second.

From what has been said, it may be inferred, that in a country or climate, where one and the same wind perpetually prevails, there can be no formal rain; and in order to form it, either the wind must entirely cease, or an opposite wind must arise, which by checking the course of the vapours, brings them into contact with those lately exhaled from the earth, and causes them to condense in proportion as they rise by the attraction of the sun, till being rendered heavier than the air by which they were supported, they descend in drops of water.

On reconsidering the circumstances of what happened at Chocope, it will appear, that during the whole day, the sky was clear, and that it was not before five in the evening that the rain began, and with it the violence of the wind. It should also be observed that in the time of the brisas in those climates where they are periodical, they blow strongest between the setting and rising of the sun; and this happening in September and the following months, forms the summer in Valles, when they enjoy clear days and a lucid atmosphere. This was the case at Chocope at the time of that rain; for though the inhabitants did not precisely mention the season in which that event happened, yet the several particulars related, especially that the south winds then prevailed with an uncommon force, sufficiently indicate that it was in the summer; as this would not have been at all remarkable in winter, when they are very variable and sometimes stormy. It may therefore be safely concluded that these events happened during the summer; and, by way of corollary, that the brisas being stronger than usual, and advancing so far on the continent as even to reach the south winds, they were overpowered by them, and shifted their point; but the succeeding south winds rendering it impossible to return in the same place, they left their former region and blew in a current nearer the earth. By

which means the vapours which had been exhaling during the whole day, after being carried by the strongest current of wind to a certain distance, ascended to the region where the drisas prevailed; and being there repelled by them, had time to condense; for being within that region where the rain is formed, or where many imperceptible drops compose one of a large magnitude and gravity, and being more minutely divided by the influence of the sun, they continued to ascend, till that power ceasing by the setting of the sun, they again condensed, and their weight becoming too heavy to be supported in the air, they descended in rain, which was the more violent as the vapours were strongly repulsed by the brisas. At the dawn, these winds, as usual, began to decrease, and the rain gradually lessened. The south winds blew all day as before; and there being then in the atmosphere, no other winds to oppose them, they carried with them the vapours as they exhaled, and the atmosphere continued clear and serene.

This happened at Chocope, situated at a much greater distance from the parts to which the brisas extend than Tumbez, Piura, Sechura, and other towns where this is more frequent, as being nearer the equinoctial: notwithstanding, no brisas or north winds are felt in that part of the atmosphere near the surface of the earth. So that it is probable, or rather indeed evident from experience, that the north winds at the time they prevail, more easily reach to the countries nearest the equinoctial, than to those at a greater distance, though not so as to be felt in the atmosphere near the earth, but in a more elevated region. Consequently, it is natural for rains to be more frequent in the former than in the latter, where these winds very seldom reach, whether in that part of the atmosphere contiguous to

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the earth, or another, which being more distant from it they blow there more violently.

I AT first declared against any positive assertion, that the opinion I have now laid before the reader is founded on such undoubted physical principles, that no other can be advanced more conformable to phænomena; it being difficult immediately to fix on causes which agreeing with all circumstances, leaves the mind entirely satisfied: and as all within the reach of human perspicuity cannot be accommodated to every particular, as entire conviction requires, let it suffice that I have here delivered my thoughts; leaving the naturalists at full liberty to investigate the true cause, and when discovered, to reject my hypothesis *.

As rain is seldom or never seen at Lima, so that place is also equally free from tempests; that so those who have neither visited the mountains nor travelled into other parts, as Guayaquil or Chili, are absolute strangers to thunder and lightning; nothing of that kind being known here. Accordingly, the inhabitants are extremely terrified when they first hear the former or see the latter. But it is very remarkable, that what is here entirely unknown, should be so common at thirty leagues distant, or even less, to the east of Lima; it being no farther to the mountains, where violent rains and tempests are as frequent as at Quito. The winds, though settled in the above-mentioned points, are subject to variations, but almost imperceptible, as we shall explain. They are also very gentle, and even in the severest win-

* A more probable conjecture is, that the vapours which arise in the great South Sea, and are brought into this neighbourhood by the south wind (where they would naturally condense into clouds and fall in showers), are attracted by the Cordilleras, whose tops are generally inveloped in clouds frightful to behold, which spend themselves in tremendous tempests, even shaking the foundations of those lofty mountains. A.

ters, never known to do any damage by their violence; so that if this country was free from other inconveniences and evils, its inhabitants could have nothing to desire, in order to render their lives truly agreeable. But with these signal advantages, nature has blended inconveniences, which greatly diminish their value; and reduce this country even below those, on which nature has not bestowed such great riches and fertility.

It has been observed, that the winds generally prevailing in Valles, throughout the whole year, comes from the south; but this admits of some exceptions, which, without any essential alteration, implies that sometimes the winds come from the north, but so very faint, as scarcely to move the vanes of the ships, and consist only of a very weak agitation of the air, just sufficient to indicate that the wind is changed from the south. This change is regularly in winter, and with it the fog immediately begins, which in some measure seems to coincide with what has been offered with regard to the reason why showers are unknown at Lima. This breath of wind is so particular, that from the very instant it begins, and before the wind is condensed, the inhabitants are unhappily sensible of it by violent head-aches, so as easily to know what sort of weather is coming on before they stir out of their chambers.

CHAP.

CHAP. VII.

Inconveniences, Distempers, and Evils, to which the City of Lima is subject; particularly Earthquakes.

ONE of the inconveniences of Lima, during the summer, is that of being tormented with fleas and bugs, from which the utmost care is not sufficient to free the inhabitants. Their prodigious increase is partly owing to the dust of that dung, with which the streets are continually covered; and partly to the flatness of the roofs, where the same dust, wafted thither by the winds, produce these troublesome insects, which are continually dropping through the crevices of the boards into the apartments, and by that means render it impossible for the inhabitants, notwithstanding all their pains, to keep their houses free from them. The moschitos are very troublesome, but much less so than the former.

THE next, and indeed a most dreadful circumstance, is that of earthquakes, to which this country is so subject, that the inhabitants are under continual apprehensions of being, from their suddenness and violence, buried in the ruins of their own houses. Several deplorable instances of this kind have happened in this unfortunate city; and lately proved the total destruction of all its buildings. These terrible concussions of nature are not regular, either with regard to their continuance or violence. But the interval between them is never of a length sufficient to obliterate the remembrance of them. In the year 1742 I had the curiosity to observe the distance of time between those which happened successively for a certain space. 1. On the 9th of May at three quarters after nine in the morning. 2. The 19th of the same month at midnight. 3. The 27th

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at 35 minutes after three in the evening. 4. The 12th of June at three quarters past five in the morning. 5. The 14th of October at nine at night; all which I carefully noted. And it must be observed that these concussions were the most considerable, and lasted near a minute; particularly that of the 27th of May, which continued near two minutes, beginning with one violent shock, and gradually terminating in tremulous motions. Between these above noted were several others, which I omitted, as being neither so lasting nor violent.

These earthquakes, though so sudden, have their presages, one of the principal of which is, a rumbling noise in the bowels of the earth, about a minute before the shocks are felt; and this noise does not continue in the place where it was first produced, but seems to pervade all the adjacent subterraneous parts. This is followed by dismal howlings of the dogs, which seem to have the first perception of the approaching danger. The beasts of burden passing the streets, stop, and, by a natural instinct, spread open their legs, the better to secure themselves from falling. On these portents the terrified inhabitants fly from their houses into the streets with such precipitation, that if it happens in the night, they appear quite naked; fear and the urgency of the danger, banishing at once all sense of decency. Thus the streets exhibit such odd and singular figures, that might even afford matter for diversion, were it possible in so terrible a moment. The sudden concourse is accompanied with the cries of children waked out of their sleep, blended with the lamentations of the women, whose agonizing prayers to the saints increase the common fear and confusion: the men also are too much affected to refrain from giving vent to their terror; so that the whole city exhibits one dreadful scene of consternation and horror. Nor does this end with the shock, none venturing to return to their

their houses through fear of a repetition, which frequently demolishes those buildings which had been weakened by the first.

My attention to set down the exact time of the above-mentioned shocks, taught me, that they happen indifferently at half-ebb or half-flood, but never at high or low water; which sufficiently confutes what some have confidently advanced, namely, that earthquakes always happen during the six hours of ebb, but never during the flood: because this favours the hypothesis they have advanced to account for their origin and causes: an hypothesis which, in my opinion, does not sufficiently correspond with observations, as to recommend itself to the assent of intelligent persons.

The nature of this country is so adapted to earthquakes, that all ages have seen their terrible devastations; and that nothing may be wanting to satisfy the curiosity of the reader, I shall introduce the account of that which laid this large and splendid city totally in ruins, with a short narrative of the most remarkable that have been felt in latter ages.

1. The first concussion since the establishment of the Spaniards in these parts, happened in 1582, a few years after the foundation of Lima; but the damage was much less than in some of the succeeding, being chiefly confined to the city of Arequipa, which being situated near that spot, where the motion of the earth was most violent, the greatest part of it was destroyed.

2. On the 9th of July 1586, Lima was visited with another earthquake, and so violent, that even to this time it is solemnly commemorated on the day of the visitation of Elizabeth.

3. In 1609, another like the former happened.

4. On the 27th of November 1630, such prodigious damage was done in the city by an earthquake, and the entire ruin of it apprehended, that

in acknowledgment of its deliverance, a festival, called Nuestra Senora del Milagro, is annually celebrated on that day.

5. In the year 1655, on the 3d of November, the most stately edifices, and a great number of houses, were thrown down by an earthquake; the inhabitants fled into the country, and remained there several days, to avoid the danger they were threatened with in the city.

6. On the 17th of June 1678, another earthquake happened, by which several houses were destroyed, and the churches considerably damaged.

7. One of the most dreadful of which we have any account, was that of the 20th of October, 1687. It began at four in the morning, with the destruction of several publick edifices and houses, whereby great numbers of persons perished; but this was little more than a presage of what was to follow, and preserved the greatest part of the inhabitants from being buried under the ruins of the city. The shock was repeated at six in the morning with such impetuous concussions, that whatever had withstood the first, was now laid in ruins; and the inhabitants thought themselves very fortunate in being only spectators of the general devastation from the streets and squares, to which they had directed their flight on the first warning. During this second concussion the sea retired considerably from its bounds, and returning in mountainous waves, totally overwhelmed Callao, and the neighbouring parts, together with the miserable inhabitants.

8. On the 29th of September, 1697, this place was visited by another terrible earthquake.

9. On the 14th of July, 1699, a great number of houses were destroyed by another concussion.

10. The 6th of February, 1716, a like disaster,

11. On the 8th of January, 1725, another.

12. On

12. ON the 2d of December, 1732, was another earthquake at one in the morning.

13, 14, 15. IN the years 1690, 1734, and 1745, three others happened, but neither violent nor lasting. But all these were less terrible than the last, as will appear from the following account of it.

16. ON the 28th of October, 1746, at half an hour after ten at night, five hours and three quarters before the full of the moon, the concussions began with such violence, that in little more than three minutes, the greatest part, if not all the buildings, great and small, in the whole city, were destroyed, burying under their ruins those inhabitants who had not made sufficient haste into the streets and squares; the only places of safety in these terrible convulsions of nature. At length the horrible effects of this short shock ceased: but the tranquillity was of short duration; concussions returning with such frequent repetitions, that the inhabitants, according to the account sent of it, computed two hundred in the first twenty-four hours: and to the 24th of February of the following year, 1747, when the narrative was dated, no less than four hundred and fifty shocks were observed, some of which, if less lasting, were equal to the first in violence.

THE fort of Callao, at the very same hour, sunk into the like ruins; but what it suffered from the earthquake in its buildings, was inconsiderable, when compared with the terrible catastrophe which followed; for the sea, as is usual on such occasions, receding to a considerable distance, returned in mountainous waves foaming with the violence of the agitation, and suddenly turned Callao, and the neighbouring country, into a sea. This was not, however, totally performed by the first swell of the waves; for the sea retiring further, returned with still more impetuosity; the stupendous water covering both the walls and

other buildings of the place; so that whatever had escaped the first, was now totally overwhelmed by those terrible mountains of waves; and nothing remained except a piece of the wall of the fort of Santa Cruz, as a memorial of this terrible devastation. There were then twenty-three ships and vessels, great and small, in the harbour, of which nineteen were absolutely sunk, and the other four, among which was a frigate called St. Fermin, carried by the force of the waves to a great distance up the country.

This terrible inundation extended to other ports on the coast, as Cavallos and Guanape; and the towns of Chancay, Guara, and the valleys della Baranca, Sape, and Pativilca, underwent the same fate as the city of Lima. The number of persons who perished in the ruin of that city, before the 31st of the same month of October, according to the bodies found, amounted to 1300, besides the maimed and wounded, many of which lived only a short time in torture. At Callao, where the number of inhabitants amounted to about 4000, two hundred only escaped; and twenty two of these by means of the abve-mentioned fragment of a wall.

According to an account sent to Lima after this accident, a volcano in Lucanas burst forth the same night and ejected such quantities of water, that the whole country was overflowed; and in the mountain near Patas, called Conversiones de Caxamarquilla, three other volcanoes burst, discharging frightful torrents of water; like that of Carguayrasso, mentioned in the first volume of this Work.

Some days before this deplorable event, subterraneous noises were heard at Lima, sometimes resembling the bellowing of oxen, and at others the discharges of artillery. And even after the earthquake they were still heard during the silence of the night; a convincing proof that the inflammable matter

matter was not totally exhausted, nor the cause of the shocks absolutely removed.

The frequent earthquakes to which South America, particularly Lima, and all the country of Valles, is subject, opens a field for enquiry not less ample than that just mentioned, concerning their cause. Many hypotheses have been formed by philosophers; but the generality, and with the greatest appearance of truth, agree in deducing them principally from the violent force of the air contained in sulphureous substances and other minerals, and also that confined in the pores of the earth; which being compressed by the incumbent load, make a very violent resistance. This is so far from implying any contradiction, that besides being countenanced by reason it is also confirmed by experience. But the apparent difficulty consists in explaining how the vents of the earth become again filled with air, after one concussion has happened; it being natural to think, that the quantity which struggled for vent, was thereby discharged, and that a long interval of time was necessary before another could be produced. Also why some countries are more subject to these terrible convulsions than others. Though this subject has been treated of by several authors, I think it my duty here to deliver the opinion which to me seems most probable.

Experience has sufficiently shewed, especially in this country by the many volcanoes in the Cordilleras which pass through it, that the bursting of a new burning mountain causes a violent earthquake, so as totally to destroy all the towns within its reach; as happened at the opening of the volcano in the desert of Carguagoazo as mentioned in Vol. I. This tremulous motion, which we may properly call an earthquake, does not so usually happen in case of a second eruption, when an aperture has been before made; or at least, the motion it causes

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in the earth is comparatively but small. Whence it is inferred that an aperture being once made, however the substances in the bowels of the mountain may take fire, the convulsion of the earth is seldom or never felt a second time. The reason of which is, that the sudden reiteration of this accident greatly augments the volume of the air by rarefaction; and as it finds an easy passage without labouring in the bowels of the earth for a vent, no other concussion is produced than what must follow from the eruption of a great quantity of air through an aperture too narrow for its volume.

The formation of volcanoes is now well known; and that they owe their origin to sulphureous, nitrous, and other combustible substances in the bowels of the earth; for these being intermixed, and, as it were, turned into a kind of paste by the subterraneous waters, ferment to a certain degree, when they take fire; and by dilating the contiguous wind or air, and also that within their pores, so that its volume is prodigiously increased beyond what it was before the inflammation, it produces the same effect as gunpowder when fired in the narrow space of a mine; but with this difference, that powder on being fired immediately disappears, whereas the volcano being once ignited continues so till all the oleaginous and sulphureous particles contained in the mountain are consumed.

Volcanoes are of two kinds, contracted and dilated. The former are found where a great quantity of inflammable matter is confined in small space; the latter where these combustibles are scattered at a considerable distance from one another. The first are chiefly contained in the bowels of mountains, which may be considered as the natural depositaries of these substances. The second may be considered as ramifications, which though proceeding from the former, are, however, independent, extending

tending themselves under the plains, and traversing them in several directions. This being admitted, it will appear, that in whatever country volcanoes, or depositaries of these substances, are very common, the plains will be more diversified with these ramifications; for we are not to imagine that it is only within the bosoms of mountains that substances of this nature exist, and that they are not disseminated through all the parts of the adjacent region. Thus the country now under consideration, abounding in these igneous substances more than any other, must by the continual inflammation which necessarily follows their natural preparation for it, be more exposed to earthquakes.

Besides the suggestions of natural reason, that a country containing many volcanoes must also be every where veined with ramifications of correspondent substances, it is confirmed by experiment in Peru; where we find almost universally mines of nitre, sulphur, vitriol, salt, bitumen, and other inflammatory substances, which sufficiently confirm the truth of these inferences.

The soil both of Quito and Valles, particularly the latter, is hollow and spongy, so as to be fuller of cavities or pores, than is usually seen in that of other countries; and consequently abounds with subterraneous waters. Besides which, as I shall presently shew more at large, the waters, from the ice continually melting on the mountains, being filtrated through these pores during their descent, penetrate deep into the cavities of the earth; and during their subterraneous course, moisten, and turn into a kind of paste, those sulphureous and nitrous substances; and though they are not here in such prodigious quantities as in volcanoes, yet they are sufficient, from their inflammatory quality, to rarefy the air contained in them, which easily incorporating itself with that confined in the innumerable pores, cavities, or veins of the earth, compresses

compresses it by its greater expansion, and at the same time rarefies it by its heat; but the cavities being too narrow to admit of its proper dilatation, it struggles for a vent, and these efforts shake all the contiguous parts; till at last, where it finds the least resistance, it forces itself a passage, which sometimes closes again by the tremulous motion it occasions, and at others continues open; as may be seen in different parts of all these countries. When on account of the resistance being equal, it finds a passage in several parts, the chasms or fissures are generally smaller, so that rarely any vestiges remain after the concussion. At other times when the subterranean cavities are so large as to form subterranean caverns, they not only rend the earth, and at every shock leave it full of disruptions, but also cause it to sink into spacious hollows; as I particularly observed near the town of Guaranda, a place in the jurisdiction of Chimbo, in the province of Quito; where in the year 1744 all the ground on the one side of the chasm sunk near a yard, the other side rising in the same proportion, though with some inequalities on both sides.

The loud subterraneous noises preceding earthquakes, and which imitate thunder at a distance, seem to correspond with the above-mentioned cause and formation of earthquakes, as they can only proceed from the rarefaction of the air on the ignition of the explosive substances; which being impetuously propagated through all the caverns of the earth, propelling and at the same time dilating what is contained in them, till all the cavities being pervaded, and no vent found, the efforts for a further dilatation begin, and form the concussion with which it terminates.

It must be observed that at the time when the air, which had been confined within the earth, bursts through it, neither the light nor fire emitted from the chasms are seen. The reason is, that this light and

and fire exist only at the instant when the matter becomes inflamed, and the air spreading itself through all the veins, the light is extinguished by its dilatation, and becomes afterwards imperceptible. It is necessary to suppose that there must be some, though a short interval, between the inflammation and effect. Neither is the flame permanent, the substance ignited not containing those solid and oleaginous particles which supply the volcanoes. Besides, they are not in sufficient quantity to ascend from the subterraneous caverns where they took fire to the superficies of the earth. Farther, this not being the place where the matter was originally contained, but that where it has forced a passage for the quantity of air which its rarefaction augmented, the first light is lost among the meanders of its course, and therefore not to be seen when the wind violently forces a passage. There have, however, been instances when the light has been seen, though much oftener the smoke; but this is generally lost in the clouds of dust ascending at the time of the concussion.

The shocks are repeated at intervals, of a few days, sometimes of a few hours; proceeding from the matter being dispersed in different places, and each in a different degree of aptitude for inflammation, one part kindling after another sucessively, as each is more or less prepared. Hence proceed also the different violence of the shocks and the different intervals of time. For the quantity first inflamed increases, by its heat, other inflammable portions of matter; whence a part which would not have been ignited till after some days, by means of this adventitious fire, becomes so within a few hours. The second shocks are more violent, and cause a greater destruction than the first; for the fire of the portion of matter which is first inflamed, though in itself small, is sufficient to accelerate the fermentation of a much

a much larger quantity, and consequently must be attended with more powerful effects.

Though the summer here, as we have already observed, is considerably warm, yet it is not productive of venomous creatures, which in this country are not known; and the same may be said of all Valles, though there are some parts, as Tumbez and Piura, where the heat is nearly equal to that at Guayaquil. This singularity can therefore proceed from no other cause than the natural drought of the climate.

The distempers most common at Lima are malignant, intermittent, and catarrhous fevers, pleurisies, and constipations; and these rage continually in the city. The small-pox is also known here as at Quito, but is not annual; though when it prevails, great numbers are swept away by it.

Convulsions are likewise very common and no less fatal. This disorder, though unknown at Quito, is frequent all over Valles, but more dangerous in some parts than in others. Something has already been said of this distemper in our account of Carthagena, but a more circumstantial description of it was reserved for this place.

This distemper is divided into two kinds, the common or partial, and the malignant or arched convulsions. They both come on when nature is struggling in the crisis of some acute distemper, but with this important difference; that those attacked with the former, often recover, though the greater part die on the third or fourth day, the term of its duration; while those who have the misfortune of being attacked by the latter, sink under it in two or three days, it being very extraordinary to recover, and is therefore termed malignant.

The spasms or convulsions consist in a total inactivity of the muscles, and a constriction of the nerves of the whole body, beginning with those of

the head; and these nerves being the channels which convey nourishment to the body, and this nourishment being precluded by the constriction of its conduits, they all successively suffer; the muscles, by having lost their activity, cannot assist in the motion of the nerves, and these being constringed, can no longer perform their office. Add to this a pungent humour dispersing itself through all the membranes of the body, and causing insupportable pains; so that the groaning patient labours under inconceivable tortures, which are still increased on his being moved, though with the greatest care and gentleness, from one side to the other. The throat is so contracted that nothing can be conveyed into the stomach. The jaws are also sometimes so closely locked, as impossible to be opened. Thus the miserable patient lies without motion, and tortured in every part of his body, till nature quite exhausted falls a victim to this deleterious distemper.

IN the partial kind, the pulse is more affected than in the distemper which preceded it, and commonly abates the violence of a fever. But in the malignant kind it augments, the circulations being quickened; and whether it be the effect of the humour impetuously circulating through every part, or of the pain proceeding from the laceration of the membranes and abrading the muscles, the patient falls into a lethargy, but which does not remove the torturing sensation of these punctures, often so insupportable, that the miserable patient violently turns himself, and thus augments his agonies, as evidently appears from his piercing cries and groans.

THE malignant and arched spasm, even in the first stage, is so violent as to cause a contraction of the nerves of the vertebræ from the brain downwards; and as the distemper increases, and the malignant humour acquires great activity, the nerves become more and more constricted, that the body of the patient,

patient, contrary to nature, inclines backward into an arch, and all the bones become dislocated. However terrible the pains resulting from hence may seem, they are still increased by those of the other species of convulsions, when the violence is such that the patient usually loses all sensation, and falls into a total inaction, not having breath to utter his complaints.

It is common at the beginning of this distemper to be totally convulsed, so that every part of the patient is affected, and, during the continuance, is, as it were, deprived of all sensation. Their return is more frequent and lasting as the distemper increases, till nature becomes entirely spent; when the lethargic fits succeed, and it is generally in one of these that the patient breathes his last.

The usual method of treating this distemper is by keeping both the bed and the chamber very close, even with a fire in it, that the pores being opened by the heat, the transpiration may be more copious. Laxative clysters are often injected to mollify the contractions of the intestines, and other internal parts. External applications are also applied to soften the parts, and open the ducts by which nature may evacuate the morbid humour. For the same intention and to check its progress, cordials and diuretic draughts are prescribed; and also the bath; but the latter only at the beginning of the first stage of the distemper; for if it is found to increase on the second day, bathing is no longer ordered.

The women of Lima are subject to a distemper, extremely painful, very contagious, and almost incurable: namely, a cancer in the matrix, which even at the beginning is attended with such excruciating pains, that their lives are one continued series of groans and complaints. During its progress, they discharge great quantities of morbid humours, become

come attenuated, fall into a state of languor, which gradually puts a period to their lives. It usually continues some years, with intervals of ease, during which, if the evacuations do not entirely cease, they are considerably intermitted; the pains seem over, and they are capable of dressing themselves and walking abroad; but the disease suddenly returns with double violence, and the patient becomes totally disabled. This distemper comes on so imperceptibly, as not to be indicated either by the countenance or pulse, till at its height; and such is the contagion of it, that it is contracted only by sitting in the same chair commonly used by an infected person, or wearing her cloaths; but it has not been known to affect the men, husbands usually living with their wives till the last stage of the distemper. Two causes are assigned for this malady: their excessive use of perfumes, which they always carry about them, and may doubtless contribute greatly to promote it; the other a continual riding in their calashes, but this does not seem to be of so much consequence as the former. For then the most distinguished of the fair sex in other countries, who ride in coaches, and even use the more violent exercise of the horse, would not be exempt from it.

Slow or hectic fevers also prevail greatly in these countries, and are likewise contagious, but more from a want of proper care in the furniture and apparel of the person infected, than any malignancy of the climate.

The venereal disease is equally common in this country as in those we have already mentioned; it is indeed general in all that part of America; and as little attention is given to it till arrived to a great height, the general custom in all those parts, a repetition here would be needless.

CHAP.

CHAP. VIII.

Fertility of the Territories of Lima, and the Manner of cultivating the Soil.

IT is natural to think that a country, where rain is seldom or ever known, must, of necessity, be totally barren; whereas the country of Lima enjoys a fertility to be envied, producing all kinds of grain, and a prodigious variety of fruits. Here industry and art supply that moisture which the clouds seem to withhold: and the soil is by this means rendered remarkably fruitful, amidst a continual drought.

It has already been observed, that one of the principal cares of the Yncas was the cutting and disposing in the most advantageous manner, trenches or small canals, in order to conduct the waters of the rivers to nourish every part, and render large fields capable of producing grain. The Spaniards finding these useful works ready executed to their hands, took care to keep them in the same order; and by these are watered the spacious fields of wheat and barley, large meadows, plantations of sugar-canes and olive-trees, vineyards and gardens of all kinds; all yielding uncommon plenty. Lima differs from Quito, where the fruits of the earth have no determined seasons; but here the harvests are gathered in, and the trees drop their leaves, according to their respective natures; for those which grow spontaneously in a hot climate, though the liveliness of their verdure fades, their leaves do not fall off till others supply their place. The blossoms also have their respective times, and are correspondently succeeded by fruits; so that this country resembles those of the temperate zones, no less in the product and seasons of corn, blossoms, fruits and

and flowers, than in the difference of winter and summer.

Before the earthquake in 1687, when this city suffered in so deplorable a manner, the harvests of wheat and barley were sufficient to supply the wants of the country without any importation, especially of wheat; but by this convulsion of nature, the soil was so vitiated, that the wheat rotted soon after it was sown, occasioned, probably, by the vast clouds of sulphureous particles then exhaled, and the prodigious quantities of nitrous effluvia diffused through it. This obliged the owners of the lands to apply them to other uses, and accordingly many of them were turned into meadows of clover, plantations of sugar-canes, and other vegetables, which they found not subject to the same misfortune. After the land had continued forty years in this state of sterility, the husbandmen began to perceive such alteration in the soil, as promised a speedy return to its former goodness. Accordingly some trials were successfully made with wheat, and by degrees that grain was found to thrive as before that dreadful event. But whether it be from the other plants, which have been cultivated in those parts, or from any mistrust of the husbandmen, the same quantity has not been sown as before. It is natural to think that the late dreadful earthquake must have had the same pernicious effects on the soil; though by means of the establishment of the corn trade with Chili since that time, the consequences will not be so sensibly felt. The fields in the neighbourhood of Lima are chiefly sown with clover, of which there is here a consumption not to be parallelled in any other place: it being the common fodder for all beasts, particularly the mules and horses, of which there is an inconceivable number.

The other parts of the country are taken up with plantations already mentioned, among which those of

of canes are not the least, and yield an excellent kind of sugar. All these fields and plantations are cultivated by negro slaves, purchased for this service; and the same is seen in the other improved parts of Valles.

The olive plantations appear like thick forests; for besides the height, magnitude, and fulness of leaves of these trees, in all which they exceed those of Spain, they are never pruned, by which means their branches become so interwoven, that the light cannot penetrate through their foliage. The plough is not used here; the only cultivation they require, being to clear the holes made at the foot of each for receiving the water, to keep the trenches open which convey it, and every three or four years to cut down all shoots or cions, in order to form passages for gathering the fruit. With this small trouble the inhabitants have an uncommon plenty of the finest olives, which they either commit to the press for oil, or pickle, they being particularly adapted to the latter, both with regard to their beauty, largeness, and flavour. Their oil is much preferable to that of Spain.

The country contiguous to the city is covered with gardens, producing all the herbs and fruits known in Spain, and of the same goodness and beauty, besides those common to America; all which flourish here in a very uncommon degree; so that none of the parts of Peru, at least such as we visited, are to be compared with those of the neighbourhood of Lima, where every place is covered with fruits and esculent vegetables.

It also enjoys another singular advantage, the whole year being, as it were, summer with regard to the plenty and freshness of fruits; for the seasons of the year varying alternately in Valles and the mountains, when the time of fruits is over in Valles, it begins on the skirts of the mountains; and the distance

tance from Lima being not above twenty-five or thirty leagues, they are brought thither, and by this means the city is constantly supplied with fruits, except a few, as grapes, melons and water-melons, which requiring a hot climate, do not come to perfection in the mountains.

The grapes are of various kinds; and among them, one called the Italian, very large and delicious. The vines extend themselves on the surface of the ground, which is very well adapted to support them, being either stony or full of sand. These vines are pruned and watered at proper times, and thrive remarkably without any other care.

No other culture is bestowed on those designed for wine, for both at Ica, Pisco, Nasca, and all other parts where they grow, they are formed into espaliers. None of the grapes near Lima are used in making wine, the demand for them in other respects being too large.

The soil is stony and sandy, that is, consisting of smooth flints or pebbles, which are so numerous that as other soils are entirely sand, rock, or earth, this is wholly of the above stones; and in some parts prove very inconvenient to travellers, whether in a carriage or on horseback. The arable lands have a stratum of about a foot or two of earth, but below that the whole consists entirely of stones. From this circumstance, the similarity of all the neighbouring coasts, and the bottom of the sea, this whole space may be concluded to have been formerly covered by the ocean, to the distance of 3 or 4 leagues, or even farther, beyond its present limits. This is particularly observable in a bay about five leagues north of Callao, called Marques, where in all appearance, not many years since, the sea covered above half a league of what is now Terra Firma, and the extent of a league and a half along the coast.

The rocks in the most inland part of this bay are perforated and smoothed like those washed by the waves; a sufficient proof that the sea formed these large cavities, and undermined such prodigious masses as lie on the ground, by its continual elisions; and it seems natural to think that the like must have happened in the country contiguous to Lima, and that parts, consisting of pebbles like those at the bottom of the adjacent sea, were formerly covered by the water.

Another singularity in this arid country is, the abundance of springs, water being found every where with little labour, by digging only four or five feet below the surface. This may arise from two causes; the one, that the earth, being, from its composition, very spungy, the water of the sea easily insinuates itself to a great distance, and is filtrated in passing through its pores. The other, that the many torrents after descending from the mountains, soon lose themselves in these plains, but continue their course along the subterranean veins of the earth; for this stony quality of the soil from the nature of the springs cannot extend to any great depth, and underneath it the stratum is hard and compact; consequently the water must be conveyed to the most porous parts, which being the stony, it there precipitates into a subterranean course, leaving the surface dry. We have already observed * that from many of the rivers in Valles, though apparently dry, the inhabitants procure a sufficient quantity of water by digging wells in the beds over which their waters run in the winter: others might be passed without being known, but the bottom consisting entirely of pebbles, wherever the beasts set their feet, the water immediately oozes out. The reason of this is, that the water at that time runs a little below the surface, and I do not doubt but the same will be found in

* Chap. I. of this volume.

in all Valles, though at different depths in different places.

This plenty of subterraneous streams is doubtless of great advantage to the fertility of the country, particularly with regard to the larger plants, whose roots strike deepest; and this seems a bountiful indulgence of the wise Author of Nature, who to provide against the sterility which would certainly affect these countries from a want of water, has sent a supply from the mountains, either in open rivers or subterraneous canals.

The lands in the jurisdiction of Chancay, like the other parts of the coasts of Peru, are manured with the dung of certain sea birds, which abound here in a very extraordinary manner. These they call guanoes, and the dung guano, the Indian name for excrement in general. These birds, after spending the whole day in catching their food in the sea, repair at night to rest on the islands near the coast, and their number being so great as entirely to cover the ground, they leave a proportionable quantity of excrement or dung. This is dried by the heat of the sun into a crust, and is daily increasing, so that notwithstanding great quantities are taken away, it is never exhausted. Some will have this guano to be only earth endowed with the quality of raising a ferment in the soil with which it is mixed. This opinion is founded on the prodigious quantities carried off from those islands, and on the experiment made by digging or boring, by which the appearance at a certain depth, was the same as at the superficies; whence it is concluded, that the earth is naturally endowed with the heating quality of dung or guano. This would seem less improbable, did not both its appearance and smell prove it to be the excrement in question. I was in these islands when several barks came to load with it; when the insupportable smell left me no room to doubt of the

nature of their cargo. I do not however pretend to deny, but that it may be mixed with earth, or that the most superficial part of the earth does not contract the like virtue, so as to produce the same effect. But however it be, this is the manure used in the fields sowed with maize, and with proper waterings is found greatly to fertilize the soil, a little of it being put close to every stem, and immediately watered. It is also of use in fields of other grain, except wheat and barley, and, consequently, prodigious quantities of it yearly used in agriculture.

Besides the orchards, fields, and gardens, with which this country is so delightfully variegated, there are other parts where nature itself spontaneously furnishes beautiful prospects for the inhabitants, and plenty of excellent food for their cattle; particularly the hills of St. Christopher and Amancaes, whose perpetual verdure diversified in spring with elegant flowers, seems to invite the neighbouring inhabitants to a nearer enjoyment of the beauties it presents at a distance to their view. The parts in the neighbourhood of the city to the distance of six or eight leagues, offer the like entertainment; and accordingly many families resort thither for the change of air, and the tranquillity of rural amusement. The hills called Amancaes, already mentioned, have their name from a certain flower growing on them. It is yellow, and of the campanula form, with four pointed leaves. Its colour is remarkably brilliant, and in that wholly consists its value, being totally void of fragrancy.

Besides these delightful retreats, the city has a publick walk in the suburb of St. Lazaro, called Alameda, consisting of rows of orange and lemon trees; along the banks of the river is another called the Acho, to which there is a daily resort of coaches and calashes.

The

The only monuments of antiquity remaining in the neighbourhood of Lima are the guacas, or sepulchres of the Indians, and some walls, which were built on both sides of the roads, and are frequently seen all over this country. But three leagues north-east of the city, in a valley called guachipa, are still standing the walls of a large town. Through ignorance I did not visit them whilst I was at Lima: the account of them, however, which the ingenious marquis de Valde Lyrios was pleased to give me, may be equally relied on, as if related from my own knowledge; especially as he took a very accurate survey of the whole. He observed, that the streets were very narrow; that the walls of the houses, which in common with all the buildings of that time were without roofs, were only of mud, and that each house consisted of three small square apartments. The doors towards the street, were not so high as the general stature of a man, but the walls wanted little of three yards. Among all the houses which composed this large town, situated at the foot of a mountain, is one, whose walls overlook all the others, and thence it is concluded to have belonged to the casique or prince; though its ruinous condition renders it impossible to determine absolutely. The inhabitants of this valley, where the fruitful fields are watered from the river Rimac, at no great distance from these ruins, call them Old Caxamarca, though it cannot now be discovered whether that was the real name of the town in the times of paganism. For there neither remains any memorial of such tradition, nor any mention of it in the histories of that kingdom, written by Garcilazo, and Herrera; so that all we know is, that the epithet old is now applied to it by way of distinction from the present town of Caxamarca.

One astonishing particular in the walls of this town, and in all others in the neighbouring valleys, is,

is, that though built on the surface of the earth, without any foundation, they have withstood those violent earthquakes which overthrew the more solid buildings of Lima and other large towns erected in the Spanish manner: having received no other damage than what naturally results from being forsaken, or what the drivers have done who make it a resting place for their cattle in the road to Lima.

From the construction of these houses it may be inferred, that long experience has instructed the natives, that in parts so subject to earthquakes, it was improper to lay a foundation in order to strengthen the walls; and tradition informs us, that when the newly conquered Indians saw the Spaniards dig foundations for lofty buildings, they laughed at them, telling them they were digging their own sepulchres; intimating, that the earthquakes would bury them under the ruins of their houses. It is indeed a melancholy proof of pride and obstinacy, that after having the prudent example of the Indians before their eyes, the total ruin of the city at four different times in less than the space of two hundred years has not been able entirely to eradicate the destructive passion for airy and elegant buildings, though these necessarily require large and lofty walls, which must have a foundation proportional to the magnitude of the structure, and the weight they are to support.

CHAP. IX.

Of the Plenty and different Kinds of Provisions at Lima.

THE fertility of the soil, the goodness of the climate, and the convenient situation of Lima, concur to maintain in it a constant plenty. The fruits

fruits and herbs have been already mentioned; it remains that we consider the meat and fish with which it is also equally provided.

The bread at Lima is incontestably the best in all this part of America, both with regard to its colour and taste, the goodness of the corn being improved by the manner of working it; and at the same time so reasonable, that the inhabitants use no other. It is of three kinds: one called criollo, the crumb of which is very light and spongy; the second French bread; and the last soft bread. It is kneaded by negroes employed by the bakers, many of whom are very rich, and their shops always well provided. Besides their own slaves, the bakers are also obliged to receive any delivered up to them by their masters to work as a punishment; and for these, besides finding the slaves in provisions, they pay the master the usual wages in money or in bread. This punishment is the severest that can be inflicted on them, and, indeed, all the hardships and cruelties of the galleys are less than what these wretches are obliged to undergo. They are forced to work the whole day and part of the night, with little food and less sleep; so that in a few days the most vigorous and stubborn slave becomes weak and submissive, and prostrates himself before his master, with tears, intreaties, and promises of amendment on being removed from that place, the dread of which is doubtless of the greatest use in awing the vast number of slaves, both within and without the city.

Their mutton is the most common food, and is very palatable from the nitrous pastures where the sheep are fattened. The beef also is good; but little eaten except by the Europeans, so that two or three beasts supply the city for a week. Here is also plenty of poultry, partridges, turtle-doves, &c. Pork is also in great abundance, though not equally delicate with that of Carthagena. The lard is used in dressing

ing all kinds of dishes whether of flesh or fish, oil being only used in salads and the like. This method of cookery is said to have had its rise when the country afforded no oil, and has been continued to the present time, notwithstanding it is now produced in great quantities. Antonia de Rivero, an inhabitant of Lima in the year 1660, planted the first olive-tree ever seen in Peru.

From the mountains are often sent by way of present, frozen calves; being killed there, and left two or three days on the heaths to freeze; after which they are carried to Lima, where they may be kept any time required, without the least tendency to putrefaction.

Of fish there is still a greater variety daily brought from the neighbouring parts of Chorillos, Callao, and Ancon, the Indian inhabitants of which make fishing their whole business. The most palatable are the corbinas, and the pege reyes, or king's fish; but those in the greatest plenty, and at the same time very palatable, are the anchovies. The corbinas, and the king's fish, infinitely excel those of Spain; the latter is also remarkable for its size, being generally six or seven Paris inches in length; yet even these are thought to be surpassed by those caught in Buenos Ayres river. It is a salt-water fish, but very little different from that caught in the rivers of Spain. The river of Lima affords a sort of prawns, two or three inches in length, but those should rather be called cray-fish.

The whole coasts abound with such shoals of anchovies, as exceed all comparison; and besides the vast quantities caught by fishermen, they are the chief food of innumerable flights of birds, with which all those islands abound, and commonly called guanoes, possibly from the guano or dung mentioned in the preceding chapter; many of them are indeed alcatraces, a kind of gull, though all comprehended

prehended under the generical name of guanoes. A little after the appearance of the sun, they rise from those islands in such large and thick flights as totally to cover them, and fly towards the sea for an hour or two, without any visible decrease of their number. When at some distance from the land they divide themselves, and begin their fishing in a very entertaining manner. They fly in a circle at a considerable height above the water, and on seeing a fish, they dart down with their beak foremost and their wings closed with such force that the agitation of the water is seen at a distance; after which they rise again into the air and devour the fish. Sometimes they remain a considerable time under water, and rise at some distance from the place where they fell, doubtless because the fish has endeavoured to escape, thus disputing celerity with them in their own element. They are continually seen in the place they frequent, some watching in gyrations, some darting down, others rising with their prey; while their great numbers render this confusion diverting to the spectator. When they are either tired or satisfied they alight upon the waves, and at sun-set, forming themselves into one body, withdraw to the islands where they pass the night.

At the port of Callao it is observed, that all the birds which rest on those islands to the N. of it, in the morning universally fly towards the S. in quest of prey, returning in the evening to their place of rest; when the middle of the flight is over the harbour, neither the beginning nor end can be seen, and the whole flock take up two or three hours in passing over.

Though shell fish are very scarce along this coast, some are found near Callao; particularly a kind, the shell of which resembles that of a muscle, though much larger. The fish itself has more the appearance of an oyster, and much the same taste.

The

The wines at Lima are of different sorts, white, red, and dark red: and of each sort some are very generous and delicious. They are imported from the coasts of Nasca, Pisco, Lucumba, and Chili; but the latter produces the best, and among them some muscadel. The wine of Nasca is white, and has the least demand of any, being inferior to the others both in quality and taste. That from Pisco has the greatest sale, and from the same place come all the brandies either used at Lima or exported; no rum being either made or used here.

Most of the dried fruits are brought from Chili; and by means of the trade carried on between the two kingdoms, Lima is supplied with all sorts of fruits known in Spain, as almonds, walnuts, filberts, pears, apples, &c. so that their tables cannot in this respect fail of plenty and elegance, having at one time the fruits of the different seasons, both of America and Europe. But amidst this plenty, every thing is very dear, the price being four or five times as much as at Quito, bread only excepted. Wine, oil, and dried fruits, are some of the cheapest. The poor class, however, as the negroes and other casts, live tolerably well, fish, which is little esteemed by the opulent, selling at a low price; the same may be said of mutton and beef, with regard to the inhabitants of this country in general *.

Sweetmeats are also here in the same plenty as in the other parts of South America, though seldom eaten, except as desserts, and even then very moderately. Instead of chocolate, mate, or Paraguay tea, is generally used, and prepared twice a day. Though this has here the defect already observed, it is better prepared than in any other part.

* A quarter of their best beef may be bought for eight rials (3s. 7d. sterling); the hide of a beast being, commonly, of more value than the carcase. A.

CHAP.

CHAP. X.

Trade and Commerce of Lima.

THE city of Lima could not have attained to such splendour, if, besides being the capital of Peru, it had not been also the general staple of the kingdom. But as it is the residence of the government and chief tribunals, so it is also the common factory for commerce of every kind, and the centre of the products and manufactures of the other provinces, together with those of Europe, brought over in the galleons or register ships; and from hence they are distributed through the vast extent of these kingdoms, whose wants are supplied from Lima, as their common mother. At the head of this commerce is the tribunal del consulado, which appoints commissaries to reside in the other cities of its dependencies, extending through all Peru.

All the wealth of the southern provinces is brought to Lima, where it is embarked on board the fleet, which, at the time of the galleons, sails from Callao to Panama. The proprietors of the treasure commit it to the merchants of Lima, who traffic at the fair with this and their own stock. The same fleet returns to the harbour of Paita, where the European merchandizes of value purchased at Porto Bello fair are landed, in order to avoid the delay of sailing to Callao, and sent by land to Lima, on droves of mules; but those of less value are carried thither by the same ships.

On the arrival of these commodities at Lima, the merchants remit to their correspondents such parts as they had a commission to purchase, reserving the rest in warehouses to dispose of on their own account to traders, who at this time resort to Lima,

or

or send them to their factors in the inland provinces, who remit the returns in money or bills of exchange to their principals at Lima. These consignments are repeated till they have disposed of their whole stock. Thus the cargo of a flotilla lasts a considerable time, there being no immediate vent for the whole.

The produce of the sales in the inland parts of the kingdom, is sent to Lima in bars of silver, and pignas*, and is coined at the mint in this city. Thus the traders have not only a great profit in the sale of their goods, but also in the returns of their silver, which they take at a lower rate than is allowed them for it. All these sales may be considered as an exchange of one commodity for another; for he who sells the goods agrees both with regard to their price, at the rate in which he is to take the silver bars, or pignas; and thus two species of trade are transacted at the same time, one on a sale of goods, and the other of silver.

The remittances sent to Lima during the interval between the flotillas, are laid out in manufactures of the country, great quantities of which come from the province of Quito; and this trade is carried on in all respects like the former; for the consumption of them being equal or rather larger, they are not less necessary here than in Europe, being worn by all the lower class of people, who cannot afford the price of the European stuffs; and the generality of traders who come to Lima purchase stuffs of both kinds, that they may be provided with assortments for customers of all ranks.

Besides this commerce, which is the most considerable, and transacted wholly by means of this city, Lima has also its particular trade with the king-

* Pignas are porous light masses of silver, being an amalgam of mercury and dust taken out of the mines.

doms

doms both of North and South America. The most considerable commodity received from the former is snuff, which is brought from the Havannah to Mexico, and after being there improved is forwarded to Lima, and from thence sent into the other provinces. This trade is carried on nearly in the same manner as that of Panama; but those who deal in this commodity, never trouble themselves with any other except perfumes, as ambergrise, musk, &c. and porcelain ware. Some of these traders are settled at Lima; others reside there occasionally, but are in general factors to the merchants at Mexico. Lima also receives from the ports of New Spain naphtha, tar, iron, and some indigo for dying.

The kingdom of Terra Firma sends to Lima leaf-tobacco, and pearls, which here meet with a good market; for besides the great numbers worn by the ladies, no mulatto woman is without some ornament or other made of them. During a free assiento of negroes, this commerce is always carried by way of Panama, and to a considerable amount.

The ladies, and indeed women of all ranks, have a very ancient custom, namely, the carrying in their mouths a limpion, or cleanser, of tobacco. The first intention of this was to keep the teeth clean, as the name itself intimates. These limpions are small rolls of tobacco, four inches in length, and nine lines in diameter, and tied with a thread, which they untwist as the limpion wastes. One end of this they put into their mouth, and after chewing it for some time, rub the teeth with it, and thus keep them always clean and white. The lower class of people, who generally pervert the best things, carry this custom to such excess, as to keep continually in their mouths a roll of tobacco, an inch and a half in diameter; affecting to distinguish themselves by the largeness of their limpions, though it absolutely disfigures them. This custom, together with that of smoaking, which is equally

common

common among the men, occasions a great demand for leaf tobacco. The limpions are made of Guayaquil tobacco mixed with some of that brought from the Havannah to Panama; but that used in smoaking comes from Santa Mayobamba, Jaen de Bracamaros, Llulla, and Chillaos, where it grows in the greatest plenty, and is best adapted to that purpose.

All the timber used in building houses, refitting ships, or building small barks at Callao, is brought from Guayaquil, together with the cacao; but the consumption of the latter is here very small, the Paraguay tea being more generally used. The timber trade is carried on by the masters of ships, who bring it hither on their own account, as we have already observed in describing Guayaquil, and depositing it in store-houses at Callao, sell it as opportunity offers.

The coasts of Nasca and Pisco send to Lima wine, brandy, raisins, olives and oil: and the kingdom of Chili, wheat, flour, lard, leather, cordage, wines, dried fruits, and some gold. Besides these all sorts of goods are also laid up at Callao, in store-houses built for that purpose; some on account of the owners who remit them, others for masters of ships who purchase them on the spot where they grow, or are made. Every Monday during the whole year there is a fair at Callao, whither the proprietors and dealers resort from all parts; and the goods are carried according to the buyers' direction on droves of mules kept there for that purpose by the masters of the warehouses, and whose profit wholly consists in the hire of these beasts.

The provisions brought to Lima are not only sufficient to supply its numerous inhabitants, but great quantities of all kinds are sent to Quito, and its jurisdiction, to Valles and Panama. Copper and tin in bars are brought from Coquimbo; from the mountains

mountains de Caxamarca, and Chacapoyas, canvas made of cotton for sails and other stuffs of that kind, and also of Pita: cordovan leather, and soap, are made all over Valles.* From the southern provinces, as Plata, Oruro, Potosi, and Cusco, is sent Vicuna wool for making hats, and some stuffs of a peculiar fineness. Lastly, from Paraguay the herb called by that name is sent, of which there is an amazing consumption, it being sent from Lima among the other provinces, as far as Quito. There is no province in Peru, which does not remit to Lima its products and manufactures, and supplies itself from hence with the necessary commodities. Thus Lima is the emporium to which people resort from all parts; and trade being always in a constant circulation, besides the continual resort of strangers, the families of rank are enabled to support the expences of that splendour I have already mentioned; for without such continual assistance they must either contract their expences, or fall victims to their ostentation.

It would naturally be imagined that by a commerce so extensive and important, many vast fortunes must be acquired, especially as every branch of it is attended with great profits; but if there are some who actually do acquire great riches, neither their number nor opulence are equal to what might be expected; for by a narrow inspection there will hardly be found above ten or fifteen houses of trade, exclusive of immoveables as lands and offices, whose stock in money and goods amounts to five or six hundred thousand crowns; and to one that exceeds this sum, there are more that fall short of it. Many possess from one to three hundred thousand crowns, and

* Their cotton canvas is not above four inches wide, so that sail-making in this part of America is very tedious; but their sails made of this narrow canvas are very strong and lasting. A.

these are indeed the persons who compose the main body of trade. Besides these there are great numbers of inferior traders, whose capitals do not exceed fifty or a hundred thousand crowns. The paucity of immense fortunes amidst such advantages is doubtless owing to the enormous expences; whence, though their gains are great, they can hardly support their credit; so that after paying the fortunes of their daughters, and the establishing their sons, the wealth of most families terminates with the life of him who raised it, being divided into as many small stocks as he had dependents; unless some, either by industry or good fortune, improve the portion they obtained by inheritance.

The inhabitants of Lima have a natural disposition and aptitude for commerce, and the city may be considered as an academy to which great numbers repair to perfect themselves in the various arts of trade. They both penetrate into the finesses of the seller, and artfully draw the purchaser into their views. They are blessed with a remarkable talent of persuasion, at the same time that they are incapable of being persuaded, as well as of artfully eluding objections. They affect to slight what they are most desirous of purchasing, and by that means often make very advantageous bargains, which none can obtain from them. But after all these precautions and finesses in buying and selling, for which they are so distinguished, none are more punctual and honourable in performing their contracts.

Besides the shops where stuffs and goods of that kind are sold, there are others for snuff; and in these may be purchased the wrought plate, which is bought in the cities near the mines, where it is made.

The wholesale traders, who have large warehouses, are not above keeping shops where they sell by retail, which is reckoned no disgrace; and thus they gain that profit which they must otherwise allow to others.

And from this indulgence granted to every branch of commerce, it flourishes very greatly. There are, however, many families, who, as I have already observed, support a proper splendor entirely by the revenue of their estates, without joining in the cares and hurry of commerce. But a greater number with estates, add the advantages of commerce, in order to preserve them. These, however, deal only at the fairs of the galleons, and in other large branches of commerce; and find the benefit of having abandoned those scruples brought by their ancestors from Spain, namely, that trade would tarnish the lustre of their nobility.

CHAP. XI.

Extent of the Jurisdiction of the Viceroy of Peru: together with the Audiences and Diocesses of that Kingdom.

THE foregoing accounts naturally lead to the extent of the audience of Lima, and the jurisdiction of the viceroy of Peru. But such a particular description as I have already given * of Quito, requiring a personal knowledge of all its provinces and jurisdictions, and also a particular work, from the extensiveness of the subject, I shall confine myself to some principal accounts, but which will convey an adequate idea of the vast dominions of this country. In order to this I have consulted several persons, some of which have been vested with high employments here, and others whose commendable curiosity, as natives of this country, had prompted them to acquire an exact knowledge of it. This was a resource of absolute necessity; no opportunity having offered

* Vol. I.

of visiting the inland parts of these countries; and the accounts we received of them at Lima, were not to be depended upon, with that confidence necessary to their being inserted here; for considering the vast distance between the capital and some provinces, it is no wonder they are but little known at Lima. The reader will therefore indulge me in giving a superficial account of some; for according to the method in which I began to write the history, we shall insert such particulars only as are authentic; it being undoubtedly more advantageous to say a little with truth, than to engage in prolix and uncertain particulars.

In order the better to describe the countries governed by the viceroy of Peru, without departing from the plan hitherto observed, I shall divide the whole jurisdiction of its government, into those audiences of which it consists; these into the dioceses they contain; and the dioceses into jurisdictions under a corregidor.

The viceroyalty of Peru in South America, extends over those vast countries, included in the jurisdictions of the audience of Lima, Los Charcas, and Chili; and in these are comprehended the governments of Santa Cruz de la Sierra, Paraguay, Tucuman, and Buenos Ayres. Though these three provinces and the kingdom of Chili have particular governors invested with all the authority agreeable to such a character; and as such are absolute in political, civil, and military affairs, yet, in some cases, are subordinate to the viceroy; for instance, on the death of any inferior governor, the vacancy is supplied by him. Before the erection of the viceroyalty of the new kingdom of Granada in 1739, that of Peru, as we have already observed, extended to the countries of the two audiences of Terra Firma and Quito; but those being then separated from it, the bounds of it on the north were the jurisdiction

risdiction of Piura, which extends to those of Guayaquil and Loxa, and that of Chacapayas, which joins to the government of Jaen de Bracamoros. Thus the viceroyalty of Peru begins at the bay of Guayaquil, at the coast of Tumbez, in 3° 25′ south latitude, and reaches to the land of Magellan in 50° consequently it extends 1012 sea leagues. Eastward it partly terminates on Brazil, being bounded by the celebrated line, or meridian of demarkation, or that which separates the dominions of Spain and Portugal, and on the coast of the north sea: and on the W. is terminated by the south sea.

The audience of Lima erected in the year 1542, though it was the year 1544 before any session was held in that city, contains within its jurisdiction one archbishoprick, and four bishopricks, viz.

The archbishoprick of Lima, and the bishopricks of Truxillo, Guamanga, Cusco, and Arequipa.

The archbishopric of Lima, to which the precedence in every respect belongs, shall be the subject of this chapter. It contains fourteen jurisdictions, which I shall treat of in the order of their situation, beginning with those nearest the capital, and concluding with those which are most remote: the same method shall also be observed in the other diocesses.

I. The Curcado or circuit of Lima.

II. Chancay.	IX. Yauyos.
III. Santa.	X. Caxatambo.
IV. Canta.	XI. Sarma.
V. Canete.	XII. Jouxa.
VI. Ica, Pisco, and Nasca.	XIII. Conchucos.
VII. Guarachia.	XIV. Guyalas.
VIII. Guanuco.	XV. Guamalies.

I. II. III. The jurisdiction of Lima, Chancay, and Santa have been already described in Chap. III.

IV. The jurisdiction of Canta begins at the distance of five leagues N. N. E. of Lima, where it terminates on the circado of that city. It extends

above thirty leagues, and the greater part of them taken up by the first branch of the Cordillera of the Andes; so that the temperature of the air is different in different parts of the country; that part which lies low, or among the valleys being hot, those on the skirts of the mountains, which are also intermixed with some plains, temperate; and those in the upper parts of the mountains cold. This difference of air is of great advantage both to the fruits of the earth and pastures; for by appropriating every species to its proper degree of heat, the produce is large, and exceedingly good. Among all the fruits the papa is particularly distinguished, and the roots carried to Lima, where they meet with a good market. The vast fields of bombon, part of which belongs to this jurisdiction, are by their high situation, always cold; yet they afford pasture for innumerable flocks of sheep. These extensive tracts of land are divided into haciendas, or estates belonging to noble families of Lima. At Guamantanga, one of the towns in this jurisdiction is a miraculous crucifix, devoutly worshipped; the inhabitants of Lima, and the neighbouring country, go thither in pilgrimage at Whitsuntide to assist at a festival, instituted particularly in honour of it.

V. The town of Canete is the capital of the jurisdiction of its name. Its jurisdiction begins at the distance of six leagues south from Lima, and extends along the coast in the same rhumb above thirty leagues. The temperature of the air in this jurisdiction is the same with that in the valleys of Lima; and the country being watered by a large river, and other lesser streams, produced vast quantities of wheat and maize. Great part of the lands are planted with canes, from whence they extract an excellent sugar. These profitable tracts of land belong also to noble families. In the neighbourhood of Chilca, situated about ten leagues from Lima, is found

found saltpetre of which gunpowder is made at that city. Besides these advantages it has a good fishery, which affords a comfortable subsistence to the Indian inhabitants of the towns, particularly those situated near the sea coast; together with plenty of fruits, pulse, and poultry, the breeding of which is another occupation of the Indians; whence a large trade is carried on between this jurisdiction and Lima.

VI. Ica, Pisco, and Nasca are three towns which denominate this jurisdiction; one part of it runs along the coast southward, and its territories extend above 60 leagues; but are intermixed with some desarts, and the country being sandy, those parts which are beyond the reach of the trenches cut from the rivers are generally barren. I say generally, because there are some tracts, which, without the benefit of an artificial watering, are planted with vines, and produce excellent grapes, the roots being supplied with moisture from the internal humidity of the earth. Great quantities of wines are made from them, and chiefly exported to Callao, and from thence to Guayaquil and Panama; also to Guamanga, and other inland provinces: they also extract from these wines great quantities of brandy. Some parts of this jurisdiction are planted with olive-trees, which produce excellent fruit either for eating or oil. The fields, which are watered by the trenches, yield an uncommon plenty of wheat, maize, and fruits. The jurisdiction of Ica is remarkable for spacious woods of algarrobales or carob-trees, with the fruit of which the inhabitants feed vast numbers of asses, for the uses of agriculture. The Indians who live near the sea apply themselves to fishing, and after salting carry it to the towns among the mountains, where they never fail of a good market.

VII. The jurisdiction of Guarachia contains the first chain and part of the second of the mountains, extending

extending itself along these chains above forty leagues. This province begins about six leagues east of Lima. From the disposition of its parts, those places only which lie in the valley, and in the breaches of the mountains, are inhabited; and these are very fertile, producing great quantities of fruit, wheat, barley, maize, and other grain. In its mountains are several silver mines, though but few of them are wrought, being none of the richest.

VIII. Guanuco is a city and the capital of its jurisdiction, which begins forty leagues north-east of Lima. This city was formerly one of the principal in these kingdoms, and the settlement of some of the first conquerors; but at present in so ruinous a condition, that the principal houses where these great men lived remain as it were only monuments of its former opulence. The other parts of it can hardly be compared to an Indian town. The temperature of the air in the greatest part of its territories is very pure and mild; and the soil fruitful. Several kinds of sweetmeats and jellies are made here, and sold to other provinces.

IX. The jurisdiction of Yauyos, begins twenty leagues south-east from Lima, and takes up part of the first and second chain of the Cordilleras; consequently the temperature of the air is different in different parts. The greatest length of this jurisdiction is about thirty leagues, and abounds in fruits, wheat, barley, maize, &c. whilst other parts are continually clothed with verdure, and feed numerous herds and flocks for the markets of Lima; and these are the most considerable articles of its commerce.

X. The jurisdiction of Caxatambo, which begins 35 leagues north of Lima, extends about 20 leagues, and partly among the mountains, whence the temperature of the air is various; but the whole territory is very fertile in grain. It has also some silver mines, which are worked, and the Indians have manufactures

of bays, which make part of the trade of this jurisdiction.

XI. The jurisdiction of Sarma is one of the largest in this archbishoprick. It begins forty leagues north-east from Lima, and terminates eastward on a tract of land inhabited by wild Indians, called maran-cochas, who often make inroads into the territories of this jurisdiction. The difference of the air in its several parts, renders it capable of producing all kind of grain and fruits, which the inhabitants are not wanting to improve. The temperate parts are sown with wheat, barley, maize, and other grain; while the colder parts afford pasture to infinite numbers of cattle of all kinds. This province is also rich in silver mines; and as many of them are worked, they spread affluence all over the country. Besides these important sources of commerce, and that of the cattle, the making of bays and other coarse stuffs, profitably employ great numbers of Indians in most of its towns.

XII. The jurisdiction of Jouxa borders on the southern extremity of the former, and begins about forty leagues east of Lima, and extends forty more along the spacious valleys and plains between the two Cordilleras of the Andes. In the middle of it runs a large river, called also Jouxa, the source of which is in the lake of Chincay-Cocha, in the province of Sarma. It is also one of the branches of the river of the Amazons. The whole jurisdiction of this province is divided into two parts by the river, and in both are several handsome towns, well inhabited by Spaniards, Mestizos, and Indians. The soil produces plenty of wheat and other grain, together with a great variety of fruits. It has also a considerable share of trade, being the great road to the provinces of Cusco, Paz, Plata, and others to the southward, here called Tiera, de Ariba, or the upper country. Like the former it borders eastward on the wild Indians of the mountains, but among which the order of St. Francis has established

blished several missions, the first being in the town of Ocopa. Within its dependances are several silver mines, some of which being worked, greatly increase the riches of this province.

XIII. The jurisdiction of Conchucos begins forty leagues N. N. E. of Lima, and extends along the center of the Cordillera; so that its air is different according to the height of the situation of its several parts, the mildest of which produce all kinds of grain and fruits, and the others, where the effects of the cold checks this fertility, afford pasture for cattle of all kinds. In this jurisdiction are great numbers of looms; the principal occupation of the Indians being several kinds of woollen manufactures, and these constitute the greatest part of its commerce with other provinces.

XIV. The province of Guyalas, like the former, extends along the center of the Cordillera, beginning fifty leagues from Lima, and in the same direction as the other; this jurisdiction is large, and has different temperatures of air. The low parts produce grain and fruits, the upper abound in cattle and sheep, which form the greatest branch of their trade.

XV. The last is that of Guamalies, which, like the former, is situated in the center of the Cordillera, consequently its air very different. This jurisdiction begins eighty leagues N. E. of Lima, and its situation being rather cold than temperate, few places are fertile in its whole extent, which is above forty leagues. The Indian inhabitants of the towns apply themselves to weaving, and make a great variety of bays, serges, and other stuffs, with which they carry on a very considerable trade with the other provinces, destitute of such manufactures.

The preceding provinces, together with the following in the audience of Lima, as in those belonging to that of Charcas, are full of towns, villages and hamlets, inhabited by Spaniards, Mestizos, and Indians; but with some difference, the number of Spaniards be-

ing greater in some, and in others that of the Indians. Many of them are indeed solely inhabited by the latter. The distance from the capital of the province, especially to the towns situated on its frontiers, being so great, as to render it impossible for the corregidor to discharge his office every where with the necessary punctuality and attention, the province is divided into several districts, consisting of three or four towns more or less, according to their largeness and distance; and over these is placed a delegate.

EVERY settlement of any consequence maintains a priest; and so commendable is their provision in this respect, that sometimes two, three, or more small places join to support one, either alone or with a curate; so that some ecclesiastics have distant settlements under their care. These incumbents are either seculars or regulars, according to the right acquired by each of these classes, as having been employed in the conversion of the Indians immediately after the conquest.

CHAP. XII.

Of the Provinces in the Diocesses of Truxillo, Guamanga, Cusco, and Arequipa.

NORTH of the archiepiscopal diocess of Lima, lies the bishoprick of Truxillo, and with it terminates on that side both the jurisdiction of that audience, and the viceroyalty of Peru; but the whole extent of this diocess is not under the jurisdictions of this audience, nor of that of the viceroy; for it also includes the government of Jaen de Bracamoros, which, as we have already observed (Vol. I.) belongs to the province and audience of Quito. We shall therefore exclude it, and only give an account of the seven jurisdictions

risdictions in the diocess of Truxillo belonging to the viceroyalty of Peru, and the audience of Lima.

Jurisdictions in the diocess of Truxillo.

I. Truxillo.
II. Sana.
III. Piura.
IV. Caxamarca.
V. Chachapayas.
VI. Llulia, and Chilloas.
VII. Pataz, or Caxamarquilla.

I. II. III. A sufficient account having already been given (chap. I. II.) of the jurisdictions of Truxillo, Sana, and Piura, it only remains to speak of the other four.

IV. Caxamarca lies to the eastward of Truxillo, and its jurisdiction extends along a vast interval betwixt the two Cordilleras of the Andes. It enjoys a fertility of all kinds of corn, fruits, and esculent vegetables; also cattle, sheep, and especially hogs, of which they sell vast numbers to the farmers in the valleys, who after fattening them with maize, send them to the markets in the great towns; particularly the farmers of the valley of Chincay and others, who derive a considerable trade in these creatures at Lima, Truxillo, and other flourishing places. The Indians throughout this jurisdiction weave cotton for ship's sails, bed-curtains, quilts, and other uses, which are sent into the other provinces. Here are also some silver mines, but of little consequence.

V. On the same side, but more towards the east, lies the jurisdiction of Chachapayas. Its temperature is hot, being without the Cordilleras, and to the eastward its territories have a low situation. It is of great extent, but very thinly inhabited; and the products of the earth only such as naturally flourish in such a climate. The Indians here are very ingenious in making cottons, particularly tapestry, which for the liveliness of the colours, and delicacy of the work, make an elegant appearance; these, together with the sail-cloth, bring great profits to this country, being highly valued in the other provinces.

VI. South

VI. South of Chachapayas, and also on the east side of the Cordillera of the Andes, lies the jurisdiction of Llulla and Chilloas, which is low, warm and moist, and covered with woods, so that great parts of it are uninhabited. It borders on the river of Moyabamba, which beginning its course from these southern provinces of Peru, forms the river of the Amazons, as we have already observed.* The principal commodity of this country is tobacco, which, with a particular kind of almonds called andes, and a few other fruits natural to its climate, form the commerce carried on by this province with the others.

VII. The last jurisdiction of this diocess is that of Pataz, or Caxamarquilla. From its different situations it has a variety of products: but is particularly remarkable for gold mines; its chief commerce consisting in exchanging that metal for current money, especially silver coin, which is the more esteemed here for its scarcity.

Guamanga the second diocess.

The city of Guamanga, the capital of this diocess, was founded in the year 1539, by Don Francisco Pizarro, on the site of an Indian village of the same name. The Spaniards added the name of San Juan del la Victoria, in memory of the precipitate retreat of Manco the Ynca, from Pizarro, who offered him battle. This city was founded for the conveniency of the trade carried on between Lima and Cusco; for during this long distance, there was at that time no town, whence the travellers frequently suffered by the incursions of Manco's army. This gave occasion to building the city on the spot where the Indian village stood, though extremely inconvenient with regard to provisions, as lying contiguous to the great chain of the Andes; but the war being happily terminated by the entire defeat of Manco's party, the city was removed to its present situation. Its jurisdiction, regulated

* Vol. I.

lated at the time of its foundation, began at the frontiers of Jouxa, and reached to the bridge of Valcas; but at present it is bounded by the provinces which surround it, and contains the town of Anco, about three leagues from it: the city is situated on the declivities of some mountains not remarkable for their height, which extending southward, inclose a spacious plain to the eastward of the town, watered by a small stream descending from the neighbouring mountains; but the ground on which the city is built, being higher than the breach through which the river flows, the inhabitants were obliged to provide themselves with small fountains. Among the number of inhabitants, Guamanga boasts at least of twenty noble families, who live in the centre of the town, in spacious houses of a considerable height, built partly of stone, and covered with tiles. Besides the largeness of the apartments they have extensive gardens and orchards, though it is no small difficulty to keep these in order, on account of the scarcity of water. The large Indian suburbs round the city, add greatly to its extent, and the houses though low are chiefly of stone, and roofed, which considerably augments the appearance of the city. This is indeed the general manner of building in the towns of this kingdom, remote from the coast.

The cathedral is very splendid, and its chapter, besides the bishop, consists of a dean, archdeacon, chanter, two canons by composition, a penitentiary, and two prebendaries. It has a seminary for the service of the church, under the title of St. Christopher. The church of this seminary is that belonging to the parish of the Spaniards, and another dedicated to St. Ann, the parish church of the Indians. Besides these are the chapels of Carmenca, Belin, St. Sebastian, and St. John the Baptist depending on it. The parish of Magdalena inhabited by Indians, is under the care of the Dominicans, and the incumbent has the title of priest.

priest. The city has also an university, with professors of philosophy, divinity and law, and equal privileges with that of Lima, they being both royal foundations. The corporation is composed of the principal nobility of the city, at the head of which is the corregidor, and out of this body the alcaldes are chosen, to superintend the civil and political government.

Within the walls of this city are the convents of St. Dominic, St. Francis, the fathers of Mercy, St. Augustine, St. Juan de Dios, a college of Jesuits, an hospital of St. Francis de Paula. The nunneries are of the order of St. Clare, and the Carmelites; and a religious sisterhood.

The jurisdictions in the diocess of Guamanga, are

I. Guamanga.

II. Guanta.	VI. Angaraes.
III. Vilcas Guaman.	VII. Castio Vineyna.
IV. Andogualas.	VIII. Parina-Cocha.
V. Guanca Belica.	IX. Lucanas.

I. The jurisdiction of Guamanga enjoys in every part so good a temperature, that it abounds in variety of grain, fruit and cattle, and is very populous. One part of its commerce consists in bend-leather for soles of shoes, which are cut out here. Conserves and sweetmeats are here made in great quantity.

II. The jurisdiction of Guanta which lies N. N. W. of Guamanga, begins a little above four leagues from that city, and is in length about thirty leagues. It is very happy in the temperature of the climate, and fertility of the earth; but its silver mines, which were formerly very rich, are now greatly exhausted. In an island formed by the river Jouxa, called in that country Tayacaxa, grows in remarkable plenty the caca already mentioned in Vol. I. This herb, and the lead produced from the mines of that metal in this country, are the branches of its commerce. It supplies the city of Guamanga with great part of its corn and fruits.

III. S. E. of Guamanga, and between six and seven leagues from that city is Vilcas Guaman, which extends above 30 leagues. The greatest part of this country, lying in a temperate air, besides a sufficiency of corn, and fruits, and esculent vegetables, has very fine pastures, in which are bred vast quantities of cattle of all kinds. The Indians in the towns of this jurisdiction apply themselves to weaving bays, corded stuffs, and other branches of the woollen manufactory, which are carried to Cusco, and other provinces; but this trade is rendered very laborious by the great distance of the several places. Here is still remaining a fort built by the old Indians, and resembles that already deseribed, Vol. I. near the town of Cannar; at the town of Vilcas Guaman was another, very famous, but taken down in order to erect a church with the stones.

IV. East a little inclining to the S. of Guamanga is Andogualas, extending eastward along an intermediate space between two branches of the Cordillera, above twenty miles, having the advantage of being watered by several small rivers. Its climate is partly hot, and partly temperate, so that the soil being watered by these streams, produces all kinds of fruits and grain in great plenty, especially maize, wheat and sugar canes. This province is one of the most populous in all those parts; in it the gentry of Guamanga have large sugar plantations.

V. The government of Guanca Belica begins thirty leagues north of Guamanga. The town which gives name to this goverment, was founded on account of the famous rich quicksilver mine, and to the working of it, the inhabitants owe their whole subsistence; the coldness of the air checking the growth of all kinds of grains and fruits, so that they are obliged to purchase them from their neighbours. The town is noted for a water where such large petrefications are formed, that the inhabitants

bitants use them in building houses, and other works. The quicksilver mines wrought here, supply with that necessary mineral all the silver mines of Peru; and notwithstanding the prodigious quantities already extracted, no diminution is perceived. Some attribute the discovery of these mines to a Portuguese, called Henrique Garces, in the year 1566, who accidentally met an Indian with some pieces of cinnaber, called by the Indians, Ilimpi, and used in painting their faces. But others, among whom are Acosta, Laett, and Escalona, say that the mines of Guanca Belica, were discovered by a Navincopa, or Indian, and servant to Amador Cabrera; and that before the year 1564, Pedro Contreras and Henrique Garces had discovered another mine of the same kind at Patas. But however it be, the mines of Guanca Belica are the only ones now worked; and the use of quicksilver for aggregating the particles of silver began in the year 1571, under the direction of Petro Fernandes Velasco. The mines of Guanca Belica immediately on the discovery were claimed in the king's name, and alternately governed by one of the members of the audienza of Lima, with the title of superintendant, whose office expired at the end of five years, till in the year 1735, when Philip V. appointed a particular governor of these mines, with the same title of superintendant, but thoroughly acquainted with the nature of extracting this mineral, having been employed in those of the same nature in Spain; and by his œconomy the mines are worked with less charge, and will not be so soon exhausted. Part of the quicksilver found here is sold on the spot to miners, and the remainder sent to all the royal offices in the kingdom of Peru, for the more commodious supply of those whose mines are at a great distance.

VI. The jurisdiction of Angaraes depends on the

the government of Guanca Belica, and begins about twenty leagues W. N. W. of the city of Guamanga. Its territories reach above twenty leagues; its air is temperate, and it abounds in wheat, maize, and other grains and fruits, and also breeds vast droves of cattle of all kinds.

VII. West of the city of Guamanga, is the jurisdiction of Castio Vineyna. In some parts this province extends above thirty leagues, and has such a variety of temperatures, that it produces every kind of grain and fruits. The heaths which are the coldest parts, are frequented by a kind of sheep called vicunna, whose wool is the most considerable article of its commerce. This animal was also common in the provinces of Jouxa, Gaunuco, and Chuquiabo, till the conquest of those countries, when every one hunted them at pleasure for the sake of their wool, without restraint from the government, they became, as it were, exterminated in those parts; now they are only to be found in the summits of mountains or the coldest heaths, where they are not caught without great difficulty.

VII. About twenty leagues south of the city of Guamanga, is the jurisdiction of Parina-Cocha, which reaches about twenty-five leagues, and lies principally in so temperate an air, that the soil, besides excellent pastures, abounds in grain and fruits. It has also several mines both of silver and gold, which now produce more considerably than heretofore. These valuable metals make the chief branch of its active commerce; its passive being the same as in the following jurisdiction.

IX. The jurisdiction of Lucanas begins about twenty-five or thirty leagues south-west of Guamanga. Its temperature is cold and moderate. The parts of the former breed large droves of all sorts of cattle; and those of the latter are fertile in grain, herbs and

and fruits. It also abounds in valuable silver mines, in which chiefly the riches of Peru consist, and by that means made the center of a very large commerce; great numbers of merchants resorting hither with their goods, and others for purchasing such provisions as their own countries do not afford, for which they give in exchange ingots and pinnas of silver.

III. *Diocess of the Audience of Lima. Cusco.*

Of all the cities in Peru, Cusco is the most ancient, being of the same date with the east empire of the Yncas. It was founded by the first Ynca Mango Capac, as the seat and capital of his empire. Having peopled it with the first Indians who voluntarily submitted to him, he divided it into two parts, which he called high and low Cusco, the former having been peopled by Indians which the emperor himself had assembled, and the latter by those whom his consort Mama-Ocllo had prevailed upon to leave their wandering manner of life. The first forms the N. and the latter the S. part of the city. The houses originally were low and small like cottages; but as the empire encreased, they assumed a new appearance; so that when the Spaniards landed in these parts, they were astonished at the largeness and splendour of the city, especially the magnificence of the temple of the sun, the grandeur of the palaces of the Ynca, and the pomp and richness becoming the seat of so vast an empire. It was in the month of October 1534, when Don Francisco Pizarro entered and took possession of it in the name of Charles V. emperor and king of Spain. This was followed by a siege of the Ynca Mango, who laid great part of it in ashes, but without dislodging the Spaniards.

This city stands in a very uneven situation on the sides of the mountains, there being no other more convenient near it. On a mountain contiguous to the north part of the city are the ruins of that fa-

mous fort built by the Yncas for their defence; and it appears from thence, that the design was to inclose the whole mountain with a prodigious wall, of such construction as to render the ascent of it absolutely impracticable to an enemy, and at the same time easily to be defended by those within; in order to prevent all approach to the city. This wall was entirely of free-stone, and strongly built, like all the other works of the Yncas, described Vol. I. but still more remarkable for its dimensions and the largeness of the stones, which are of different magnitudes and figures. Those composing the principal part of the work are of such prodigious dimensions, that it is difficult to imagine how it was possible for the strength of man, unassisted by machines, to have brought them hither from the quarries. The interstices formed by the irregularities of these enormous masses are filled with smaller, and so closely joined as not to be perceived without a very narrow inspection. One of these large stones is still lying on the ground, and seems not to have been applied to the use intended, and is such an enormous mass that it is astonishing to human reason to think by what means it could be brought thither. It is called la Cansada, or the troublesome, alluding probably to the labour of bringing it from the quarry. The internal works of this fortress consist of apartments, and two other walls are chiefly in ruins, but the outward wall is standing.

The city of Cusco is nearly equal to that of Lima. The north and west sides, are surrounded by the mountain of the fortress, and others called Sanca: on the south it borders on a plain, on which are several beautiful walks. Most of the houses are of stone, well contrived and covered with tiles, whose lively red gives them an elegant appearance. The apartments are very spacious, and finely decorated, the inhabitants being noted for their elegant taste.

taste The mouldings of all the doors are gilt, and the other ornaments and furniture answerable.

THE cathedral of Cusco, both with regard to materials, architecture and disposition, greatly resembles that of Lima, but is a much smaller structure. It is built entirely of stone, and the architecture is even thought to exceed it. The sacristy is called Nuestra Senora del Triumpo, being the place where the Spaniards defended themselves from the fury of the Indians, when surrounded by the army of the Ynca Mango; and though the whole city was several times set on fire, the flames had no effect on this part; which was attributed to the special protection of the Holy Virgin. It is served by three priests, one in particular for the Indians of the parish, and the other two for the Spaniards. Besides this, Cusco also contains eight other parishes; namely,

I. BELIN. II. The church of the general hospital, which has also its priest and its parish. III. Santa Anna. IV. Santiago. V. San Blas. VI. San Christoval. VII. San Sebastian. VIII. San Geronymo. And though the first of the two last be a league, and the second two leagues from the city, they are reckoned among the number of its parishes.

HERE is also a convent of Dominicans, the principal walls of which were formerly those of the temple of the sun, and at present the high altar stands in the very place, where once was a golden image of that planet. There is likewise at Cusco a convent of Franciscans, which is the head of that order in this province. The convents of the Augustines and the fathers of mercy in this city, are also the principal of their respective orders. The Jesuits have likewise a college here. The convent of St. Juan de Dios and that of the Bethlemites, which are both very large, are hospitals for the sick; the latter is particularly appropriated to the Indians, who are there used with the greatest care and tenderness.

The nunneries are those of St. Clare, St. Catherine, the barefooted Carmelites, and a Nazarene sisterhood.

The government of this city consists of a corregidor, placed at the head of the magistrates, who are the chief nobility, and out of these are annually chosen two ordinary alcaldes, according to the custom of all the cities in South America. The members of the cathedral chapter besides the bishop, are five dignitaries, namely, the dean, archdeacon, chanter, rector and treasurer; two canons by competition, a magistral, and penitentiary; three canons by presentation, and two prebendaries. Here are three colleges; in the first, called St. Anthony, a seminary for the service of the cathedral, are taught Latin, the sciences and divinity. The second is under the direction of the Jesuits, where these fathers instruct youths of fortune. The third, called St. Francis de Borja, belongs also to the Jesuits, and is appointed for the education of the sons of caziques, or Indian princes. The two former confer all degrees below that of doctor, and have been erected into universities.

Among the courts of justice, is one for the revenue, consisting of two judges. Here is also a court of inquisition, and of the croisade; together with the same offices as in the other large cities already described. Formerly this city was very full of Spaniards, and among them many noble families; but at present its inhabitants are very much declined.

Jurisdictions in the Diocess of Cusco.

I. Cusco.
II. Quispicanchi.
III. Avancay.
IV. Paucartambo.
V. Colcaylares.
VI. Chilques, and Masques.
VII. Cotobamba.
VIII. Canas, and Cances, or Tinta.
IX. Aymaraes.

IX. Aymaraes.
X. Chumbi-Vilcas.
XI. Lampa.
XII. Carabaya.
XIII. Asangaro, and Asilo.
XIV. Apolo-Bamba.

I. The jurisdiction of Cusco extends two leagues; the temperature of air is various, but both the heat and cold very supportable, except in some parts where the cold is intense: these, however, afford good pasture for all kinds of cattle, whilst the valleys produce plenty of grain and fruits.

II. The jurisdiction of Quispicanchi, begins as it were at the south gates of Cusco, stretching from E. to W. about twenty leagues. The lands belong in general to the gentry of Cusco, and produce plenty of wheat, maize, and fruits. Here are also manufactories of bays, and coarse woollen stuffs. Part of this province borders on the forests inhabited by wild Indians, and produces great quantities of coca, which forms one of the principal branches of its commerce.

III. Four leagues north-east from the city of Cusco, begins the jurisdiction of Avancay, and extends above thirty leagues; the air differing in temperature according to the situation of its parts; but is in general rather hot than temperate, and accordingly, many parts of it are taken up with large plantations of canes, which yield a very rich sugar. The lands where the air is more temperate, abound in wheat, maize, and fruits, part of which are sent to the city of Cusco. In this province is the valley Xaquijaguana, corruptly called Xajaguana, where Gonzalo Pizarro was defeated and taken prisoner by Pedro de la Gasco.

IV. Paucartambo begins eight leagues east of Cusco, and is of a considerable extent. This province produced in the time of the Yncas the greatest quantity of coca, with which it carried on a very profitable commerce; but is greatly declined since this shrub has been planted in other provinces. The soil is equally fertile in other products.

V. The jurisdiction of Calcaylares begins four leagues W. of the city of Cusco. The air every where excels that of all other provinces, and accordingly produces an exuberance of all kinds of grain and fruits. In the hottest parts called Lares, were formerly very large plantations of sugar canes, but for want of hands to cultivate them, they are at present so diminished, that instead of sixty or eighty thousand arobas, which they annually produced in the time of their prosperity, they are now reduced to something less than thirty; but the sugar is of such an excellent kind, that without any other preparation than that of the country, it is equal both in colour and hardness to the refined sugar of Europe. This diminution of its sugar, has greatly lessened the principal branch of its commerce.

VI. S. E. of Cusco, and at the distance of about seven or eight leagues, begins the jurisdiction of Chilques and Masques, extending above thirty leagues in length. The temperature of the air is proportioned to the situation of its several parts, some of which are very fertile in grain, and others feed vast numbers of cows and sheep. But besides these its commerce is greatly augmented by the woollen manufactures of the Indians.

VII. S. W. of Cusco, and about twenty leagues distance, begins the jurisdiction of Cotabamba, which afterwards extends above thirty leagues between the rivers Avancay and Apurimac, in which extent are different temperatures of air. It abounds in all kinds of cattle, and the temperate parts produce plenty of wheat, maize, and fruits. Here are also mines of silver and gold, the richness of which formerly rendered this province very flourishing; but at present their produce is greatly declined.

VIII. The jurisdiction of Canas and Canches or Tinta, begins about fifteen or twenty leagues S. of Cusco, and extends about twenty leagues in every direction,

direction. The Cordillera divides it into two parts; the highest called Canas and the lowest Canches. The latter by reason of its temperate air yields all kinds of grains and fruits; whilst the former affords pasture for very numerous flocks and herds; and in the meadows between the eminences are fed no less than twenty-five or thirty thousand mules, brought thither from Tucuma to pasture. Here is a very great fair for these creatures, to which dealers resort from all parts of the diocess. In the part called Canas is the famous silver mine Condonoma.

IX. About forty leagues S.W. from Cusco is the jurisdiction of Aymaraes, which extendst hirty farther, and like the former has different temperatures of air. The lands abound in sugar, cattle, and grain; and also in mines of gold and silver, which formerly produced large quantities of those valuable metals; but at present few of them are wrought, the country being too thinly inhabited.

X. Something more than forty leagues from Cusco, begins the jurisdiction of Chumbi Vilcas, which in some parts extends above thirty leagues, has different temperatures of air, great quantities of corn and fruits, and large herds of cattle; together with some mines of silver and gold.

XI. The jurisdiction of Lampa begins thirty leagues S. of Cusco, and is the principal of all the provinces included under the name of Callao. Its plains are interrupted with small hills, but both abound in good pasture; and accordingly this province is particularly remarkable for its quantity of cattle, with which it carries on a very profitable trade; but the air being every where cold, the only fruits of the earth are papas and quinças. Another very considerable advantage are its silver mines, being very rich, and constantly worked.

XII. The jurisdiction of Carabaya begins sixty leagues S. E. of Cusco, and extends above fifty leagues

The

The greatest part of it is cold; but the valleys so warm as to produce coca, and abounds in all kinds of fruits, grain, and pulse, together with sufficient pastures for cattle of all kinds. Here are several gold mines, and the two famous lavatories, called Lavaderos de San Juan del Oro, and Pablo Coya; also that of Monte de Ananea, two leagues from the town of Poto, where there is an office for collecting the quintos or fifth, belonging to the king. In this province also is a river, which separates it from the mountains of the wild Indians, and is known to abound so greatly in gold, that at certain times the caziques send out a certain number of Indians in companies from the towns in their respective districts to the banks of this river, where by washing the sands in small wells they dig for that purpose, they soon find a sufficient quantity of gold to pay the royal tribute. This kind of service they call chichina. This province has also mines of silver, which produce vast quantities of that metal. In 1713 was discovered in the mountain of Ucuntaya a vein or stratum nearly of solid silver, which though soon exhausted, yielded some millions, and hopes have been conceived from it of meeting with others, whose riches will be of longer continuance. This jurisdiction is also famous for the gold mine called Aporama, which is very rich, and the metal twenty-three carats fine.

XIII. The jurisdiction of Asangaro and Asilo, which lies about fifty leagues S. of Cusco, is every where cold, and consequently proper only for breeding cattle, in which, however, it carries on a very profitable trade. In the N. E. parts which border on those of Caravaya, are some silver mines, but a few of them only are worked. Some of its lands produce plenty of those roots and grains which naturally flourish in a cold air, as papas, quinoas, and capaguas; of the two last the natives make chica in the

the same manner as it is made with maize. This jurisdiction belongs to the audience of Charcas.

XIV. About sixty leagues from Cusco, on the borders of the Moxos, which are missions of the Jesuits, are others called Apolo-bamba, belonging to the Franciscans. These consist of seven towns of Indians newly converted, and who having received the doctrine of the gospel, have abandoned the savage manner in which they formerly lived. In order to render the missionaries more respected by the Indians, and at the same time to defend the latter from the insults of their idolatrous brethren, a major general is posted here, who is both a civil and military officer, administering justice, and commanding in chief the several bodies of militia formed by the inhabitants of these towns and villages.

IV. Diocess of the Audience of Lima.

Arequipa.

The city of Arequipa was founded in 1539 by order of Don Francisco Pizarro, in a place known by the same name; but this situation being found very disadvantageous, the inhabitants obtained permission to remove it to the valley of Quilca, where it at present stands about twenty leagues distant from the sea. The lands in its dependency having been united to the empire of the Yncas by Maita Capac, the goodness of the soil and the purity of the air induced that monarch, for the farther improvement of the country, to draw 3000 families from such adjacent provinces as were less fertile, and with these to people four or five towns.

This city is one of the largest in all Peru, delightfully situated in a plain, and the houses well built of stone, and vaulted. They are not all of an equal height, though generally lofty, but commodious, finely decorated on the outside, and nearly furnished within. The temperature of the air is remarkably good: and though sometimes a small frost is seen, the cold is never

never excessive, nor is the heat troublesome; so that the fields are always cloathed with verdure and enamelled with flowers, as in a perpetual spring. The inhabitants enjoy an exemption from many diseases common to other countries, partly owing to their care in keeping the streets clean by means of canals which extend to a river running near the city; and by these all the filth of the city is swept away.

But these pleasures and advantages are allayed by the dreadful shocks of earthquakes, to which, in common with all those parts of America, it is so subject, that it has been four times by these convulsions of nature laid in ruins; besides other small shocks not attended with such terrible consequences. The first of those was felt in 1582; the second on the 24th of February 1600, which was accompanied with an eruption of a volcano called Guayna-Patina, in the neighbourhood of the city; the third happened in 1604, and the last in 1725. And though the desolation attending the three last was not so universal, yet the public buildings, and the most stately houses, were laid in ruins.

The city is very populous, and among its inhabitants many noble families, this being the place where most of the Spaniards settled, on account of the goodness of the air, and the fertility of the soil; as also for the conveniency of commerce at the port of Aranta, which is only twenty leagues distant. The civil, political, and military government of the city is executed by a corregidor, who is placed at the head of the regidores, from which are annually chosen two ordinary alcaldes.

The city of Arequipa did belong to the diocess of Cusco, till the year 1609, when it was erected into a particular bishoprick on the 20th of July. The chapter besides the bishop consists of the five usual dignitaries, namely, the dean, archdeacon, chanter, rector, and treasurer; three canons and two prebends.

prebends. Besides the sacristy, which is served by two priests for the Spaniards, the parish of Santa Martha is appropriated to all the Indian inhabitants. Here are two Franciscan convents, one of observants, and the other of recollects, both belonging to the province of Cusco; also one of Dominicans, and another of Augustines, depending on Lima; and a monastery of the fathers of mercy, subordinate to that of Cusco. Under their respective fraternities of Lima here is also a college of Jesuits, and a convent and hospital of St. Juan de Dios. Here is a seminary for the service of the cathedral; and two nunneries; namely, one of the Carmelites, and the other of St. Catherine. A third is now building for the order of Santa Rosa. There is also at Arequipa an office of revenue, under the direction of an accomptant and treasurer; together with commissaries of the inquisition and croisades, with their subalterns, as in all the other cities.

Jurisdictions in the Diocess of Arequipa.

I. Arequipa.
II. Camana.
III. Condesuyos de Arequipa.
IV. Caylloma.
V. Monquegua.
VI. Arica.

I. Arequipa comprehends the suburbs and towns in its neighbourhood, where the climate being the same as in the city, the country is perpetually covered with flowers, corn, and fruits; while the excellence of the pastures is sufficiently evident from the numbers of fine cattle fed in them.

II. Along the coast of the south-sea, but at some distance from the shore, is the jurisdiction of Camana, which is very large, but contains many deserts, especially along the coast. Eastward it extends to the borders of the Cordillera; so that the temperature of some parts of its jurisdiction is nearly the same with that of the former, while others are cold; both producing grain and fruits of a correspondent nature. Its principal trade consists in asses. It has silver

mines

mines near the mountains, but of little advantage, as they are not worked.

III. N. of Arequipa and thirty leagues distant from that city, is the jurisdiction of Condesuyos de Arequipa, extending about thirty leagues, with different temperatures of the air, and consequently produces grains and fruits. Here is bred the wild cochineal, with which the Indians carry on a kind of trade with those provinces where the woollen manufactures flourish. They first pulverize the cochineal by grinding, and after mixing four ounces of it with twelve of violet maize, they form it into square cakes called mango, each weighing four ounces, and sell it for a dollar per pound. This country abounds in gold and silver mines; but they are not worked with the care and diligence of former times.

IV. At about thirty leagues east from the city of Arequipa, begins Caylloma, famous for a mountain of the same name, and the silver mines it contains. Though these mines have been long discovered and constantly and industriously worked, their produce is still so inconsiderable, that in the principal village, called by the same name, there is a governor and office appointed for receiving the king's fifths, and vending the quicksilver used in separating the metal from the ore. The cold in the greatest part of the country is so intense, that the inhabitants are obliged to have recourse to the neighbouring provinces for the fruits of the earth. Even the declivities of mountains and valleys produce but little. In some parts of this province are wild asses, like those already mentioned in Vol. I.

V. The jurisdiction of Monquegua lies about forty leagues S. of the city of Arequipa, and sixteen from the coast of the south-sea. The principal town, which bears the same name, is inhabited by Spaniards, and among them several noble and opulent families. This jurisdiction extends at least forty leagues in length,

length, and in a happy climate, adorned with large vineyards, from the produce of which great quantities of wine and brandy are made; these constitute its whole commerce, supplying all the provinces bordering on the Cordilleras as far as Potosi, by land carriage; while they are exported by sea to Callao, where they are greatly valued. Here are also papas and olives.

VI. The last jurisdiction of this diocess is Arica, which extends along the coast of the south-sea. Besides the heat, and inclemency of the air, the greatest part of the country is barren, producing only aji, or Guinea pepper, from which alone it derives a very advantageous trade, as may easily be imagined from the vast consumption of it in all these parts of America. Accordingly the dealers in this commodity resort hither from the provinces on the other side of the mountains, and by computation, the annual produce of these plantations amounts to no less than 60,0000 dollars per annum. The pods of this pepper are about a quarter of a yard in length, and when gathered are dried in the sun, and packed up in bags or rushes, each bag containing an aroba, or quarter of a hundredweight; and thus they are exported to all parts of the kingdom, and used as an ingredient in most of their dishes. Other parts of this jurisdiction are famous for vast quantities of large and excellent olives, far exceeding the finest produced in Europe, being nealy as large as a hen's egg. They extract some oil from their olives, and find a good market for it in the provinces of the Cordillera; others are pickled, and some, together with a small quantity of oil, exported to Callao.

CHAP.

CHAP. XIII.

Of the Audience of Charcas.

THE province of Charcas, in the extent of its jurisidiction, is equal to that of Lima; but with this disadvantage, that many of its parts are not so well inhabited, some being full of vast deserts and impenetrable forests; while others are full of vast plains, intercepted by the stupendous heights of the Cordilleras, so that it is inhabited in those parts only which are free from these inconveniences. The name of Charcas formerly included many populous provinces of Indians, whom the Ynca Capac Yupanqui subjected to his empire; but he carried his arms no farthe than the provinces of Tutyras and Chaqui, where he terminated his conquests towards Callasuyo. On the death of this monarch, his son, Ynca Roca, the sixth in the succession of those emperors, pushed his conquests farther in the same part, till he became sovereign of all the intermediate nations to the province of Chaquisaca, where was afterwards founded the city of Plata, at present the capital of the whole province of Charcas. Its jurisdiction begins on the north side, at Vilcanota, belonging to the province of Lampa in the diocess of Cusco, and reaches southward to Buenos Ayres. Eastward it extends to Brasil, being terminated by the meridian of demarcation; and westward part of it reaches to the south-sea, paticularly at Atacama, the most northern part of it on this side. The remainder of Charcas borders on the kingdom of Chili. These vast tracts of the land give one archbishop, and five bishops his suffragans, namely,

The archbishop of Plata.

Bishopricks.

I. La Pas. II. Santa Cruz de la Sierra.

 III. Tu-

III. Tucuman. IV. Paraguay.
V. Buenos Ayres.

Archbishoprick of the Audience of Chacas, or Chuquisaca.

La Plata.

The Spaniards having conquered all the provinces between Tumbez and Cusco, and quelled the tumults formed among the conquerors themselves, turned their thoughts on reducing the more remote nations. Accordingly in the year 1538, Gonzalo Pizarro, and other commanders, marched from Cusco at the head of a large body of troops, and advancing as far as Charcas, were opposed by the nations inhabiting this country, and the Carangues, with such vigour, that it was not till after several obstinate battles that they submitted. But their resistance did not equal that made by the Chuquisacans; for Pizarro having, after several actions, penetrated to their principal town, they besieged him in it, and the danger was so great, that without the speedy succours sent him from Cusco by his brother the marquis Don Francisco Pizarro, the few Spaniards who survived the former actions would have been all cut off. But on the arrival of this reinforcement, among which were a great number of volunteers of distinction, he routed the Indians, who being no longer able to continue the war, submitted, and acknowledged the sovereignty of the king of Spain. In the following year 1539, Pizarro, convinced of the importance of making a strong settlement there, commissioned captain Pedro Anzures to build a town, which was accordingly done on the site of that of Chuquisaca, and great numbers of those who had shared in the conquest, continued there in order to subdue the other contiguous nations. This town they called Plata, alluding to the silver mines of the mountain of Porco in its neighbourhood, and from which the Yncas received great quantities of silver,

keeping

keeping in pay a proper number of Indians for working them; but the primitive name of Chuquisaca has prevailed, and is now commonly used. This city stands in a small plain environed by eminences which defend it from the winds. The temperature of the air in summer is very mild; nor is there any considerable difference throughout the year; but in the winter which here begins in September and continues till March, tempests of thunder and lightning are very common, and the rains of long continuance; but all the other parts of the year the atmosphere is bright and serene. The houses both in the great square and those adjoining to it have one story besides the ground floor. They are covered with tiles, are very roomy and convenient, with delightful gardens planted with the fruits of Europe. But water is so scarce that they have hardly enough to supply the necessary purposes of life: the little they have being fetched from several public fountains dispersed in different parts of the city. The inhabitants consist of Indians and Spaniards, and are said to amount to about 14,000.

The cathedral is large, and divided into three aisles, of good architecture, and finely adorned with paintings and gildings. The parish is served by two priests, one for the Spaniards, and the other for the Indians. Here is also another parish called St. Sebastian, situated at one end of the city, and is appropriated to the Indians living within its precinct, who are thought to be about three thousand. The convents are those of the Franciscans, Dominicans, Augustines, the fathers of mercy, and a college of Jesuits; all spacious buildings with splendid churches. Here is also a conventual hospital of St. Juan de Dios, the expences of which are defrayed by the king; likewise two nunneries, of the order of St. Clare, and of St. Monica.

The

The city of la Plata has also an university, dedicated to St. Francis Xavier, the chairs of which are filled indifferently either by secular clergy or laymen; but the rector is always a jesuit. Here are also two other colleges in which lectures of all kinds are read. That of St. John is under the direction of the Jesuits; while the archbishop nominates to that of St. Christopher, which is a seminary.

Two leagues from Plata runs the river Cachimay along the plains, having on its banks several pleasant seats of the inhabitants; and about six in the road leading to Potosi, is the river of Philco-mayo, which is passed over by a large stone bridge. During some months of the year this river furnishes the city of Plata with great plenty of delicious fish; among which is one called the Dorado,* which generally weighs between twenty and twenty-five pounds. The other provisions, as bread, flesh and fruits, are brought from the adjacent provinces.

The chief tribunal in Plata is that of the audience, erected in the year 1559, and whose president has the titles of governor and captain-general of the province, exclusive of the government of Santa Cruz de la Sierra, Tucuman, Paraguay aud Buenos Ayres, which are independent, and in military cases absolute. It has also a fiscal, a protector-fiscal of the Indians, and two supernumerary auditors.

The magistracy or corporation, as in all other cities of this country, consists of regidores, who are persons of the first distinction, with the corregidor at their head, and from them are annually chosen two ordinary alcaldes, for maintaining order and the police. Plata was erected into a bishoprick in 1551, the place having then the title of city; and in the year 1608 was raised to a metropolis. Its chapter consists

* This is a larger species of the Dolphin, which, without plenty of good sauce, is very dry eating. A.

of a dean, archdeacon, chanter, treasurer and rector; five canons, four prebendaries and four minor prebendaries. The archbishop and his chancellor constitute the ecclesiastical tribunal.

Here is also a tribunal of croisade, with a commissary, subdelegate, and other officers: likewise a court of inquisition subordinate to that of Lima, and an office for taking care of the effects of persons dying intestate; all established on the same foundation with whose in other cities already mentioned.

The jurisdictions belonging to the archbishoprick of Plata, are the fourteen following:

I. The city of Plata, and Imperial Town of Potosi.
II. Tomina.
III. Porco.
IV. Tarija.
V. Lipes.
VI Amparaes.
VII. Oruro.
VIII. Pilaya, and Paspaya.
IX. Cochabamba.
X. Chayantas.
XI. Paria.
XII. Carangas.
XIII. Cuacica.
XIV. Atacama.

I. The jurisdiction of city the of Plata is of such prodigious extent at to include the imperial town of Potosi, which is even the continual residence of the corregidor. There also is established the office of revenue, which consists of an accountant and treasurer, with clerks; as most convenient on account of its vicinity to the mines, for taking account of the silver produced by them.

The famous mountain of Potosi, at the foot of which on the south-side stands the town of the same name, is known all over the commercial world, as having been greatly enriched by the silver it produces. The discovery of these immense mines happened in the year 1545, by an accident seemingly fortuitous. An Indian, by some called Gualca, and by others Hualpa, pursuing some wild goats up this mountain, and coming to a part very steep, he

laid hold of a small shrub in order to climb it with the greater celerity; but the shrub being unable to support his weight came up by the roots, and discovered a mass of fine silver, and at the same time he found some lumps of the same metal among the clods, which adhered to the roots. This Indian, who lived at Porco, hastened home with these first fruits of his discovery, washed the silver and made use of it, repairing when his stock was near exhausted, to this perpetual fund. At length an intimate friend of his called Guanca, observing such a happy change in his circumstances, was desirous of knowing the cause, and urged his questions with a warmth that Gualca was unable to deny. For some time they retired in concert to the mountain for fresh supplies of silver, till Gualca refusing to discover his method of purifying the metal, Guanca revealed the whole secret to his master Villarroel, a Spaniard who lived at Porco. Immediately on this information he went on the 21st of April, 1545, to view this fortunate breach in the mountain, and the mine was without delay worked, with immense advantage.

This first mine was called the Discoverer, as having been the occasion of discovering other sources of riches inclosed in the bowels of this mountain; for in a few days another was found equally rich, and called the Tin-mine; since that another has been discovered, and distinguished by the name of Rica, as surpassing all the rest: and was succeeded by the Mendieta. These are the principal mines of Potosi, but there are several smaller crossing the mountain on all sides. The situation of the former of these mines is on the north side of the mountain, their direction being to the south, a little inclining to the west; and it is the opinion of the most intelligent miners in this country, that those which run in these directions are the richest.

On a report of these important discoveries people from all parts retired to Potosi, particularly from the city of Plata, which is situated about twenty-five leagues from the mountains; so that at present, besides its extraordinary riches, having among its its inhabitants many noble families, particularly those concerned in the mines, the circuit of the town is near two leagues. The air of the mountain being extremely cold and dry,* renders the adjacent country remarkably barren, producing neither grain, fruits, herbs, or other esculents. The town, however, is so plentifully provided as to enjoy an abundance of every kind; and the trade for provisions is greater here than in any other place, that of Lima alone excepted. Nor will this appear at all strange if the great number of people employed in the mines be considered. Some provinces send the best of their grain and fruits; others their cattle; others their manufactures; and those who trade in European goods resort to Potosi, as to a market where there is a great demand, and no want of silver to give in exchange.

Besides this commerce, here are a set of persons called Aviadores, who find their account in advancing to the masters of the mines coined silver to pay their necessary expences, receiving in exchange silver in ingots and pinnas. Another article of great consequence, is the trade of quicksilver for the use of these mines; but this branch the crown has reserved to itself. The vast consumption of this mineral may in some measure be conceived by the great quantity of silver produced by these mines; for before the invention of extracting the silver with less mercury, a mark of that mineral was consumed in obtaining a mark of fine silver; and often by the

* The extremest cold in this part seldom freezes the waters thicker than an half crown.

ignorance

ignorance of the workmen, a still greater quantity; but the immense consumption of quicksilver in the mines of this mountain, and the riches extracted from it, will best appear from the following accounts of two authors, who were perfectly masters of the subject. The first is that of the Rev. Alonzo Barba, parish priest in the imperial town of Potosi, who, in a piece on metals published in the year 1637, says, that from the year 1574, when mercury was first used here in extracting the silver, the royal office of Potosi has received above 204,700 quintals of mercury, exclusive of what had been clandestinely bought by private persons, and which amounted to no small quantity. And as this was consumed in the space of sixty-three years, the annual amount is about 3,249 quintals. The second account is given us by don Gasper de Escalona, who in his Gozophilacio Perubico, declares, from very good authority, that before the year 1638, it appeared by the public accounts, that the produce of the silver amounted to 395,619,000 dollars, which in ninety-three years, the time it had then been discovered, amounted to 41,255,043 dollars per annum. Hence an idea may be formed of the vast commerce which has for many years been carried on in this town, and which is still like to continue for a long time; such enormous sums being annually bartered for goods sent hither, its whole trade consisting in silver extracted from this mountain; and if some diminution has been perceived in its produce, it is still very considerable.

At a small distance from Potosi are the hot medicinal baths called Don Diego, whither, as in other countries, some resort for health, and others for diversion.

The jurisdiction of Tomina, begins about eighteen leagues south-east from the city of Plata, borders eastward on a nation of wild Indians called Chiriguanos. The

The climate is hot, and consequently its products are such as are common to hot countries. Some parts have vineyards, and in others are made considerable quantities of sugar. It abounds also in cattle and sheep. The extent in some parts is near forty leagues. The vicinity of the Chiriguanos is a continual uneasiness to the towns in this jurisdiction, and even to the city of Plata itself, they having more than once attempted to surprize it.

III. The jurisdiction of Porco begins at the west side of the town of Potosi, and about 25 leagues distance from the city of Plata; extending about 20 farther. The coldness of its situation occasions a scarcity of grain and fruits; but, on the other hand, it abounds in fine cattle of all sorts. In this jurisdiction is the mountain of Porco, whence it has its name, and from whose mines the Yncas, as I have already observed, extracted all the silver for their expences and ornaments; and accordingly was the first mine worked by the Spaniards after the conquest.

IV. About 30 leagues south of Plata lies the jurisdiction of Tarija, or Chicas, the greatest extent of which is about 35 leagues. The temperature of the air is various, being in some parts hot, and in others cold; whence it has the advantage of corn, fruits, and cattle. This country every where abounds in mines of gold and silver, and especially that part called Chocayas. Between this province and the country inhabited by wild Indians, runs the large river Tipuanys, the sands of which being mixed with gold, are washed like those of the river Caravaga, already mentioned

V. In the same part as the former, but with a small inclination towards the south-west, is the jurisdiction of Lipes, and extends also thirty-five leagues. The air is extremely cold, so that grain and fruit thrive very little here, but it abounds in cattle, particularly those natural to the country, as the vicuna, alpaca, or

or taruga, and the llama. It must, however, be observed that these creatures are common to all the other provinces of Punas, that is, to those where the heaths and mountains are of such a height, as to render the air continually cold. Here are also mines of gold, but at present forsaken, though the remains of the old works are still visible, particularly in one of the mountains near Colcha, known by the name of Abetanis, which in the Indian language signifies a golden mine. That of St. Christopher de Acochala was formerly one of the most famous in all Peru, for the richness of its silver mines, the metal being in some parts cut out with a chissel; but now very greatly declined; which may in a great measure be imputed to a want of people for working them: it being highly probable that the same work would still produce nearly an equal quantity of that valuable metal.

VI. The jurisdiction of Amparaes begins at a little distance to the eastward of the city of Plata, and is terminated on the east by the jurisdictions belonging to the diocess of Santa Cruz de la Sierra, particularly on that of Misquepocona; and the corregidor of the province of Amparaes has the cognizance of the Indian inhabitants of Plata. Its warm parts abound in grain, particularly barley, which together with the numerous droves of cattle in the colder parts, constitute the chief branches of its trade.

VIII. North-west of Plata is the province of Oruro, whose capital San Phelipe de Austria de Oruro is 30 leagues distant from it. The greatest part of this jurisdiction is so cold as to deny it any esculent vegetables; but on the other hand it feeds numerous flocks and herds, besides great numbers of cattle peculiar to the country, as vicunas, guanacos, and llamas. Here are also many gold and silver mines; the former, though known even in the time of the Yncas, have been seldom worked; but those of silver have yielded great riches to the inhabitants of the province

province. They are now however, according to all appearance, under an irremediable decay, being overflowed, and all the endeavours hitherto used, in order to drain them, have proved ineffectual; so that those of any consideration at present are in the mountains of Popo, about twelve leagues from the town, which is large and very populous from the trade carried on there with the mines. It has a revenue office for collecting the fifths belonging to the crown.

VIII. The province of Pilaya and Paspaya, or Cinti, lies south of Plata, distance about 40 leagues. The greatest part of its jurisdiction being among the breaches of the mountains, is the better adapted for producing all kinds of grain, pulse, and fruits; which, with the great quantity of wine made here, enable it to carry on a very lucrative commerce with the other provinces, which are not so happily situated.

IX. The province of Cochabamba, lies 50 leagues south-east of Plata, and fifty-six from Potosi. Its capital is one of the most considerable cities in Peru, with regard to largeness, and the number and wealth of its inhabitants. The province in some directions extends above forty leagues. Besides the situation of the city in a most fertile plain, the whole country is so fertilized by the many rivers and streams, which every where traverse it, that this province is esteemed the granary of the whole archbishoprick, and even of the diocess de la Paz. The air also is in most parts very mild and pure; and in some spots silver mines have been discovered.

X. About fifty leagues north-west from the city de la Plata, lays the province of Chayanta, extending in some parts about forty leagues. This country is very famous for its gold and silver mines. The former are indeed at present discontinued, though the antient subterraneous passages are still open. This province is watered by the river Grande, in whose sand

sand considerable quantities of gold dust, and grains of that metal are found. The silver mines are still worked to great advantage; but with regard to cattle, this province feeds no more than are barely sufficient for its inhabitants.

XI. THE contiguous province to that of Chayanta, on the north-west side of Plata, and seventy leagues distant from that city, is that of Paria, the extent of which is about forty leagues. The air here is cold, so that it produces little grain, which is in some measure compensated by the great plenty of cattle of all kinds; and the cheeses made here, both from the milk of sheep and cows, are so highly esteemed, that they are sent into every part of Peru: It has also some silver mines. The name of this province is derived from a very large lake, being an arm of that prodigious collection of waters called Titi-caca, or Chucuito.

XII. THE province of Carangas, begins seventy leagues west from the city of Plata, and extends above fifty leagues. The climate of this jurisdiction is so cold, that the only esculent vegetables here are the papa, quinoa, and canagua; but it abounds in cattle. Here are a great number of silver mines constantly worked; among which that named Turco is very remarkable for a sort of ore termed by miners machacado; the fibres of the silver forming an admirable intertexture with the stone in which they are contained. Mines of this kind are generally the richest. Besides this there are others in this jurisdiction, which if not richer are equally remarkable; and these are found in the barren sandy deserts extending towards the coast of the South-sea. And here, only by digging in the sands, are found detached lumps of silver, not mixed with any ore or stone than what adheres in some parts to the metal. These lumps are called papas, being taken out of the ground, in the same manner as that root. It is doubtless very difficult

ficult to account for the formation of these masses of silver, in a barren and moveable sand, remote from any ore or mine. Two conjectures may, however, be offered. The first by admitting the continual reproduction of metals, of which there are indeed here so many evident proofs; as the matrices of gold and silver, met with in many parts of this kingdom. Nay the very mines themselves, after being long forsaken, have again been worked with great advantage; but the skeletons of Indians found in old mines, and covered with fibres of silver, and the inward parts also full of the same metal, seem to put the matter beyond dispute. If this be admitted, it is natural to conclude, that the primordial matter of silver is first fluid, and when it has acquired a certain degree of perfection, some parts of it are filtrated through the pores of the sand, still stopping in a place proper for completing the fixation, they there form a solid congeries of silver; and being joined with those earthy particles they collected in their course to the place where they were absorbed by the pores of the sand, consolidated with the silver.

Though this conjecture be not destitute of probability, yet I am more inclined to embrace the second, as it is, in my opinion, more simple and natural. Subterraneous fires being very common in these parts of America, as I have already observed in speaking of the earthquakes, their activity is doubtless so strong as to melt any metals deposited near the places where they begin; and to communicate to them a heat sufficient for keeping them a long time in a state of fusion; and hence a portion of silver thus melted necessarily spreads, and introduces itself through the larger pores of the earth, and continues to expand itself, till being beyond the reach of heat, it fixes, and re-assumes its former consistency, together with other heterogeneous substances collected in its passage. To this hypothesis, two objections may be offered; one

one that the metal in fusion by changing its situation, must be exposed to the cold air, and consequently, soon condense. The second that the pores of the earth being extremely minute, particularly in a sandy soil, the silver should rather be found in filaments, or fine ramifications, than in large lumps or pieces, as is really the case. To both these objections I shall endeavour to give a brief but satisfactory answer.

BEFORE the silver begins to run from the place where it was melted, the subterraneous fire had pervaded the pores of the earth, which by the dilatation of the body of air enclosed in them, became distended; the metal immediately follows, and finding a channel sufficiently capacious for introducing itself, farther compresses the particles of the earth contiguous to those it abrades, and consequently, continues its course without obstruction. The subterraneous fire which preceded the fusion, communicates to the earth a degree of heat sufficient to expel the cold air, so that the metal runs through it, till by degrees, the heat is abated, and the metal becomes fixed. Another circumstance which contributes to prolong the heat is, there being often no spiracle to these passages, whence the earth through which the metal flows, does not soon emit the first heat it contracted from the subterraneous fire; consequently the metal will not be fixed till at a considerable distance from the place of liquidation: but the first particles of the metal being checked by the cold they have gradually contracted, those which follow flow to the same place, and there form a concreted mass, or mixed body of silver and scoria, brought with it from the original mine. It now remains that we examine whether what is actually observed in these lumps of silver, agrees with what has been advanced, in order to determine whether this opinion have a probable foundation.

THESE papas or lumps of silver, are of a different composition from those found in the mines, having all

all the appearances of melted silver, as any person, a stranger to the manner of finding them, would immediately conclude. In them the silver forms a mass, and the surface is covered over with terrene particles, few or none of which are mixed with the silver; conformable to what is seen in metals melted, and suffered to cool without separating the dross. The terrene particles adhering to the silver are black, and exhibit all the marks of calcination, except that in some it is stronger than in others; and as this must happen if the lumps are formed by the fusion of the metal, it seems natural to conclude that they were really formed in this manner.

The size and figure of these lumps are very different; some weighing about two marks, and others much more; for among several which I saw at Lima were two, one weing 60, and the other above 150 marks, being a Paris foot in length; these indeed were the largest ever seen here. These lumps of silver are found in different parts of the same ground, though not often near one another. The metal in its course takes various directions, introducing itself into those places where it finds the least resistance; and as these parts are more or less capacious, the magnitude of the papa is greater or smaller.

XIII. About ninety leagues north of the city of Plata, but only forty from Paz, lies the province of Ciacica. Its capital, which has the same name, and all the places situated to the southward of it, belong to the archbishoprick of Plata; but many of those to the northwards of it are in the diocess of Paz. The countries in this jurisdiction extend in some parts above a hundred leagues, and consequently the temperature is various. Some spots are very hot, and produce an exuberance of coca, which shrub alone is the source of a very considerable commerce, supplying all the mine towns from Charcas to Potosi. The leaves of this plant are packed in frails, each of which must,

according to the ordinance, contain eight pounds; and its current price at Ururo, Potosi, and the other mine towns, is from nine to ten pieces of eight, and sometimes more. The colder parts feed large herds of cattle: together with vicunas, guanacos, and other wild creatures. This province has also some silver mines, but not so many, nor so rich, as the preceding province.

XIV. ATTACAMA is the western boundary of the audience of Charcas, extending to the south sea; and the principal town, called also Attacama, is no less than 120 leagues from Plata. Its jurisdiction is of a considerable extent, and a great part of it very fruitful; but intermixed with some desarts particularly towards the south, where it divides the kingdoms of Peru and Chili. On the coast in this province there is every year a large fishery of tolo, a sort of fish common in the south sea, with which a very great trade is carried on with the inland provinces, it being there the chief food during Lent, and the other days of abstinence.

CHAP. XIV.

Account of the three Dioceses of La Paz, Santa Cruz de la Sierra, and Tucuman; and of their respective Provinces.

THE province in which the present city of la Paz is situated, was formerly known by the name of chuquiyapu, which in the idiom of that country is commonly thought to signify chacra, or an inheritance of gold, and is there corruptly called Chuquiabo. Accordingly Garcelaso pretends that Chuquiyapu signifies lanza capitana, or principal lance; but this is deriving it from the general language of the Yncas, and with a difference in the penultima, it not being

being uncommon for a word nearly alike in sound to have a very different signification in each idiom. This province was first conquered by Mayta-Capac, the fourth Ynca; and the Spaniards having afterwards taken possession of it, and quelled all disturbances, this city was founded by Pedro de la Gasca, that in the vast distance of an hundred and seventy leagues between Arequipa and Plata, there might be a settlement of Spaniards, for the improvement of commerce, and the safety and conveniency of the traders. The president Gasca, committed the care of building it to Alonzo de Mendoza, with orders that it should be erected on a spot, midway between Cusco and Charcas, which are one hundred and sixty leagues from each other; and that it should be called Nuestra Senora de la Paz, in memory of the public tranquility recently settled by the defeat and execution of Gonzalo Pizarro, and his adherents. With regard to its situation, a valley in the country called las Pacasas, was pitched upon, on the 8th of October, 1548, as a place abounding in grain, and cattle, and full of Indians.

Along the valley de la Paz, flows a pretty large river, but sometimes greatly increased by torrents from the cordillera, about twelve leagues distant from the city; but from its vicinity, great part of the country is exposed to so cold an air, as hard frosts, snow, and hail are not uncommon; but the city itself is secured from them by its happy situation. Other parts are also so well sheltered, that they produce all the vegetables of a hot climate, as sugar canes, coca, maize, and the like. In the mountainous parts are large woods of valuable timber, but infested with bears, tigers, and leopards; they have also a few deer: while on the heaths are found guanacos, vicunas, and llamas, with great numbers of cattle of the European species, as will be seen in the account of each respective province.

The

The city is of a middling size, and from its situation among the breaches of the cordillera, the ground of which it stands is not only unequal, but also surrounded by mountains, without any other prospect than the channel of the river, and the adjacent mountains. When its river is increased either by rains, or the melting of the snow on the mountain, its current forces along huge masses of rocks, with some grains of gold, which are found after the flood has subsided. Hence some idea may be formed of the riches inclosed in the bowels of these mountains; but a more remarkable demonstration appeared in the year 1730, when an Indian happening to wash his feet in the river, discovered a lump of gold, of so large a size that the marquis de Castel-Fuerte, gave twelve thousand pieces of eight for it, and sent it to Spain, as a present worthy the curiosity of his sovereign.

This city is governed by a corregidor, under whom are regidores, and ordinary alcaldes, as in all other towns. Besides the cathedral, and the parish church del Sagrario, where two priests officiate, here are also those of St. Barbara, St. Sebastian, and St. Peter: the religious fraternities of Franciscans, Dominicans, Augustines, the fathers of mercy, a college of Jesuits, and a convent and hospital of St. Jaun de Dios; together with a nunnery of the order of the Conception, and another of Santa Teresa. Here is also a college of St. Jerom, for the education of youth, whether designed for ecclesiastic or civil employments.

In 1608 the church de la Paz was separated from the diocess of Chuquisaca, to which it before belonged, and erected into a cathedral. Its chapter, besides the bishop, consists of a dean, archdeacon, chanter, four canons and prebendaries; but with regard to other circumstances, being the same with several cities already described, I shall proceed to the provinces in its diocess.

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I. Bishoprick of the audience of Charcas.
La Paz.

The provinces or jurisdictions in the diocess of Paz, are the six following:

I. La Paz.	IV. Laricaxas.
II. Omasuyos.	V. Chuciuto.
III. Pacages.	VI. Paucar-Colla.

I. The jurisdiction of La Paz is of no great extent, and the city is almost the only place worth notice in it. In the adjacent cordillera is a mountain of remarkable height, called Illimani, which doubtless contains immense riches. A crag of it being some years since struck from it by a flash of lightning, and falling on a neighbouring mountain, such a quantity of gold was found in the fragments, that for some time that metal was sold at Paz, at eight pieces of eight per ounce But its summit being perpetually covered with ice and snow, no mine has been opened in this mountain. The same we have already observed of those high mountains in the province of Quito, Vol. I. all attemps having been rendered abortive.

II. North-west, and almost at the gates of Paz, the jurisdiction of Omasuyos begins, and extends about 20 leagues, being bounded on the west by the famous lake of Titi-caca, or Chucuito, of which a farther account will be given in the sequel. The air here is somewhat cold, so that it produces little grain; but that deficiency is abundantly compensated by the great numbers of cattle; besides an advantageous trade for fish, carried on in other provinces by the Indians living on the borders of the lake, who are very industrious in improving that advantage.

III. Almost south-west of Paz, is the jurisdiction of Pacages, the greatest part of which being in a cold climate, produces little grain or fruits: so that the inhabitants apply themselves to the breeding of cattle. This province is however very rich in silver mines, though but a small part of them are worked; and it is known

known from undoubted signs, that these mines were worked in the time of the Yncas. Here are also mines of talc, called jaspas blancos de Verenguela. It is of a beautiful white, and, on account of its transparency, is transported to different parts of Peru, for making panes of windows, both in churches and houses; as the stone called tecali serves for the same uses in New Spain. In these mountains are also a great number of mines of gems, particularly one of emeralds, well known in Europe, but for some latent reasons not worked; together with quarries of different species of marble. In this province is the famous silver mine called Verenguela: and likewise the mountains of Santa Juana, Tampaya, and others, well known for the immense treasures extracted from them.

IV. Adjacent to the territories of the jurisdiction of la Paz, and to the north of that city, is the province of Laricaxas, which extends 118 leagues from east to west, and about thirty from north to south. The temperature of the air is different in different parts, and some of its products are the same with those of Carabaya, by which it is terminated to the northward. This whole province abounds in gold mines, whose metal is of so fine a quality, that its standard is twenty-three caracts, and three grains. In this province is the celebrated mountain of Sunchuli, in which about fifty years since was discovered a gold mine remarkably rich, and of the standard above-mentioned; but when in its highest prosperity, it was unfortunately overflowed; and notwithstanding prodigious sums were expended in endeavours to drain it, all the labour and expence, from the works being injudiciously conducted, were thrown away.

V. The jurisdiction of Chucuito begins about twenty leagues west of Paz, and some part of it bordering on the lake of Titi-caca, that collection of waters is also called the lake of Chucuito. The extent

of this province from north to south is betwixt twenty-six and twenty-eight leagues. Its temperature is in general cold and very disagreeable, the frosts continuing one half of the year, and the other either snow or hail is continually falling. Accordingly the only esculent productions of the vegetable kingdom are the papas and quinoas. The inhabitants have however a very beneficial trade with their cattle, which abound in this jurisdiction, by salting and drying the flesh. The traders who carry it to the coast exchange it for brandy and wine; and those who go to Cochabamba, carry also papas and quinoas, which they barter for meal.

All the mountains in this province have their silver mines, and formerly produced largely, but at present are totally abandoned.

The territories of the province of Chucuito, are on one side bounded by the lake of Titi-caca, the magnitude of which merits some account to be given of it. This lake lies between these provinces, comprehended under the general name of Calloa, and is of all the known lakes of America, much the largest. Its figure is somewhat oval, inclining nearly from N. W. to S. E. its circumference is about 80 leagues, and the water, in some parts, 70 or 80 fathoms deep. Ten or twelve large rivers, besides a great number of smaller streams empty themselves into it. The water of this lake, though neither bitter or brackish, is turbid, and has in its taste something so nauseous that it cannot be drank. It abounds with fish, of two opposite kinds; one large and palatable, which the Indians call suchis; the other small, insipid and bony, termed long since by the Spaniards boyas. It has also a great number of geese and other wild fowl, and the shores covered with flags and rushes, the materials of which the bridges are made, and of which an account will be given in the sequel.

As

As the western borders of this lake are called Chucuito, so those on the E. side are distinguished by the name of Omascuyo. It contains several islands, among which is one very large, and was anciently one mountain, but since levelled by order of the Yncas; it, however, gave to the lake its own name of Titicaca, which, in the Indian language, signifies a mountain of lead. In this island the first Ynca Mancho-Capac, the illustrious founder of the empire of Perú, invented his political fable, that the sun, his father, had placed him, together with his sister and consort, Mama Oello Huaco, there, enjoining them to draw the neighbouring people from the ignorance, rudeness, and barbarity in which they lived, and humanize them by customs, laws and religious rites dictated by himself; and in return for the benefits resulting from this artful stratagem, the island has, by all the Indians, been considered as sacred; and the Yncas determining to erect on it a temple to the sun, caused it to be levelled, that the situation might be more delightful and commodious.

THIS was one of the most splendid temples in the whole empire. Besides the plates of gold and silver with which its walls were magnificently adorned, it contained an immense collection of riches, all the inhabitants of provinces which depended on the empire, being under an indispensable obligation of visiting it once a year, and offering some gift. Accordingly they always brought in proportion to their zeal or ability, gold, silver, or jewels. This immense mass of riches, the Indians, on seeing the rapacious violence of the Spaniards, are thought to have thrown into the lake; as it is certainly known, they did with regard to a great part of those at Cusco, among which was the famous golden chain made by order of the Ynca Huayna Capac, to celebrate the festival of giving name to his eldest son. But these valuable effects were thrown into another lake, six leagues S. of Cusco, in the val-

ley of Orcos; and though numbers of Spaniards animated with the flattering hopes of such immense treasures made frequent attempts to recover them, the great depth of the water, and the bottom being covered with slime and mud, rendered all their endeavours abortive. For notwithstanding the circuit is not above half a league, yet the depth of water is in most places not less than twenty-three or twenty-four fathoms.

Towards the S. part of the lake Titi-caca, the banks approach each other, so as to form a kind of bay, which terminates in a river called el Desaguadero, or the drain, and afterwards forms the lake of Paria, which has no visible outlet; but the many whirlpools sufficiently indicate that the water issues by a subterraneous passage. Over the river Desaguadero is still remaining the bridge of rushes, invented by Capac Yupanqui, the fifth Ynca, for transporting his army to the other side, in order to conquer the provinces of Collasuyo. The Desaguadero is here between eighty and a hundred yards in breadth, flowing with a very impetuous current under a smooth, and, as it were, a sleeping surface. The Ynca to overcome this difficulty, ordered four very large cables to be made of a kind of grass which covers the lofty heaths and mountains of that country, and called by the Indians Ichu; and these cables were the foundation of the whole structure. Two of these being laid across the water, fascines of dry juncia and totora, species of rushes, were fastened together, and laid across them. On these the two other cables were laid, and again covered with the other fascines securely fastened, but smaller than the first, and arranged in such a manner as to form a level surface; and by this means he procured a safe passage to his army. This bridge, which is about five yards in breadth, and one and a half above the surface of the water, is carefully repaired, or rebuilt every six months, by the neighbouring provinces,

vinces, in pursuance of a law made by that Yuca, and since often confirmed by the kings of Spain, on account of its prodigious use; it being the channel of intercourse between those provinces separated by the Desaguadero.

VI. The last jurisdiction of this bishoprick is that of Paucar-Colla, whose capital is the town of Puno. Its jurisdiction southward borders on that of Chucuito, and has the same temperature: consequently is obliged to have recourse to other provinces for the greatest part of its grain, and esculent vegetables; but abounds in all kinds of cattle, both of the European and American kinds. The Indians of the town weave bags with their wool, and sell them to great advantage. The mountains in this province contain several silver mines, and among the rest the famous Laycacota, which formerly belonged to Joseph Salcedo, and where the metal was often cut out of the mine with a chissel; but its prodigious richness accelerated the death of its owner, soon after which the waters broke into it; nor has any labour and expence been able to drain it, so that it is at present abandoned. Few of the rest are worked, the general case with almost all the silver mines in this audience, especially of those in the archbishoprick of Charcas, and this diocess of La Paz.

II. Bishoprick in the audience of Charcas.

Santa Cruz de la Sierra.

The province of Santa Cruz de la Sierra, is a government and captain-generalship: and though its jurisdiction is of a large extent, not many Spaniards are found in it, and the few towns are in general missions comprehended under the common name of Paraguay missions. The capital of the same name was erected into a bishoprick in the year 1605. Its chapter consists only of a bishop, dean, and archdeacon, having neither canons, prebendaries, or other dignitaries. The usual residence of the bishop is the city of Misque Pocona, eighty leagues from Santa Cruz de la Sierra.

The

The jurisdiction of Masque Pocona, reaches above thirty leagues; and although the city itself is very thinly inhabited, there are, in other parts of it, several populous towns. The temperature is hot, but not in a degree too great for vineyards. The valley in which the city stands is about eight leagues in circumference, and produces all kinds of grain and fruits; and the woods and uncultivated mountains afford great quantities of honey and wax, which constitute a principal branch of its commerce.

The missions belonging to the Jesuits in the parts dependent on this bishoprick, are those called Indios Chiquitos, or little Indians, a name given them by the Spaniards, on account of the great smallness of the doors of their houses. Their country lies between Santa Cruz de la Sierra, and the lake Xarayes, from whence the river Paraguay had its rise, and being increased by the conflux of others, forms the famous river de la Plata. It was about the close of the last century, when the fathers first began their preaching in this nation, and so great has been their success, that in the year 1732, they had formed seven towns, each consisting of above 600 families; and were then building others for assembling under the same laws, the great number of Indians, daily converted. These Indios Chiquitos are well made and active; and their courage has been often experienced by the Portuguese, who used to make incursions, in order to carry off the inhabitants for slaves: but the valour of these people has taught them to desist from such inhuman attempts, and, for their own safety, to keep within their limits. The arms of these Indians are musquets, sabres, and poisoned arrows. Though their language is different from that of the other nations of Paraguay, the same customs nearly obtain here, as among all the other Indians.

Bordering on this nation of Chiquitos is another of Pagan Indians called Chiriguanos, or Chiriguanaes, who

who have always refused to listen to the missionaries; though the fathers still continue to visit them at certain times, and preach to them, but prudently take care to be accompanied with some Chiquitos for their security; and thus they make now and then a few converts, who are sent to their towns, and there lead a social life. This generally happens after some misfortune in the wars continually carried on between them and the Chiquitos: when in order the more easily to obtain a peace, and that the Chiquitos may not absolutely exterminate them, they send for missionaries; but soon dismiss them again, pretending that they cannot bear to see punishments inflicted on persons merely for deviating from the rules of reason. This plainly demonstrates, that all they desire or aim at, is an unbounded licentiousness of manners.

Santa Cruz de la Sierra, the capital of this government, lies eighty or ninety leagues E. of Plata. It was originally built something farther toward the S. E. near the Cordillera of the Chiriguanos. It was founded in the year 1548, by Captain Nuflo de Chaves, who called it Santa Cruz, from a town of that name near Truxillo in Spain, where he was born. But the city having been destroyed, it was built in the place where it now stands. It is neither large nor well built, nor has it any thing answerable to the promising title of city.

III. Bishoprick of the Audience of Charcas.

El Tucuman.

Tucma, by the Spaniards called Tucuman, lies in the centre of this part of America, beginning S. of the Plata, beyond the towns of Chicas, which furnish Indians for the mines in Potosi. On the E. it borders on Paraguay and Buenos Ayres; reaches westward to the kingdom of Chilio, southward to the Pampas or plains belonging to the land of Magellan. This country, though united to the empire of the Yncas,

Yncas, was never conquered by them; having, when Vira Cocha the eighth Ynca had made himself sovereign in Charcas, sent a deputation of their chiefs, with a request of being admitted among the number of this subjects, and that he would be pleased to send them governors, that their country might partake of the benefits of those wise laws, and useful improvements, he had introduced into all the parts of his empire.

The Spaniards having penetrated into Peru, and finished the conquest of far the greatest part of that empire, proceeded to that of Tucuman in 1549, under the conduct of Juan Nunez de Prado, whom the president Pedro de la Gasca intrusted with the conduct of this expedition. He had, indeed, no opportunity of displaying his military talents; for the inhabitants being of a mild and easy disposition, readily submitted; on which the following four cities were built in that country, namely: Santiago del Estero, so called from a river of the same name on which it is built, and whose inundations greatly contribute to increase the fertility of the soil; it stands above a hundred and sixty leagues S. of Plata: San Miguel del Tucuman, twenty-five or thirty leagues W. of the former: Nuestra Senora de Talavera, something more than forty leagues N. W. of Santiago. The fourth was called Cordova de la Nueva Andalucia, and is above eighty leagues S. of Antiago.

The territories of this government being of such extent that they reach from N. to S. above two hundred leagues, and little short of a hundred in some parts from E. to W. it was judged proper to increase the number of Spanish settlements; and accordingly orders were given for building two other cities, which are Rioja, about eighty leagues S. W. of Santiago, and Santa, between sixty and seventy leagues N. W. of the same city; together with a village called San Salvador, or Xuxui, about twenty leagues N. of Salta.

But

But all these places are small, and built without either order or symmetry. The governor, notwithstanding Santiago was the first, resides at Salta; and even the bishop and his chapter at Cordova, which is the largest. The others have their respective corregidors, under whom also are the Indian villages within the dependencies of their proper cities. But of these there is no great number, the principal part of the country not being inhabitable, either from a want of water, or from their being covered with impenetrable forests. This want of inhabitants is also greatly owing to the cruelties and ravages of the savage Indians, in their frequent incursions.

THE episcopal church of Tucuman, which, as we have already observed, is in Cordova, was in the year 1570 erected into a cathedral, and its chapter now consists of the bishop, dean, archdeacon, chanter, rector and treasurer, who is elected; but has neither canons nor prebendaries.

THOSE parts of the country which are watered by the rivers, are so remarkably fertile in grain and fruits, that they produce sufficient for the common consumption of the inhabitants. The woods abound in wild honey and wax, whilst the hot parts produce sugar and cotton; the last is manufactured here, and with the woollen stuffs also wove by the inhabitants, form an advantageous branch of trade. But its great article consists in the mules bred in the luxuriant pastures of its valleys. Inconceivable droves of these creatures are sent to all parts of Peru, the Tucuman mules being famous over these countries, far exceeding all others in strength and docility.

CHAP.

CHAP. XV.

Account of Paraguay and Buenos Ayres; the two last Governments of the Audience of Charcas.

IV. Bishoprick of the Audience of Charcas.

Paraguay.

THE government of Paraguay lies S. of Santa Cruz de la Sierra, and E. of Tucuman. Southward it joins to that of Buenos Ayres; and is terminated eastward by the captainship of St. Vicente in Brazil, whose capital is the city of St. Pablo. These countries were first discovered by Sebastian Gaboro, who, coming to the river of Plata in the year 1526, sailed up the river Palana in some small barks, and thence entered that of Paraguay. He was succeeded in 1536 by Juan de Ayolos, to whom Don Pedro de Mendoza, the first governor of Buenos Ayres, had given a commission, together with a body of troops, military stores and other necessaries; and afterwards, by his orders, Juan de Salinas founded the city of Nuestra Senora de la Assumption, the capital of the province; but the discovery of the whole, and consequently the conquest of people who inhabited it, being still imperfect, it was prosecuted by Alvar Nunez, surnamed Cabeza de Baca, or Cowhead, whose eminent services, on the death of Don Pedro de Mendoza, procured him the government of Buenos Ayres.

The only settlements in the whole extent of this government, are the city of Assumption, Villa Rica, and some other towns, whose inhabitants are a mixture of Spaniards, Mestizos, and some Indians, but the greatest

greatest part of the several casts. As the city itself is but small and irregular, nothing better can be expected in Villa Rica, and other towns and villages. Its houses are indeed intermixed with gardens and plantations, but without any symmetry. It is the residence of the governor of the province, who had formerly under his jurisdiction, part of the towns composing the missions of Paraguay; but a few years since they were separated from it, and are now annexed to the government of Buenos Ayres; but without any change in the ecclesiastical government. In the city of Assumption is a cathedral, whose chapter consists of the bishop, dean, archdeacon, treasurer, and two canons. The parishes of the city of Villa Rica, and of the other towns depending on this government, are served by the Franciscans: but in the missionary towns they are solely under the care of the Jesuits; and these composing the greater number of towns in this province, I shall speak particularly of them, still keeping to that conciseness I have observed in the other jurisdictions.

The missions of Paraguay, besides those in the province of that name, include also a great many of Santa Cruz de la Sierra, Tucuman and Buenos Ayres. Within a century and a half, the epocha of their first establishment, they have been the means of bringing into the bosom of the church, many Indian nations, who lived in the blindness of idolatry, and the turpitude of the savage customs transmitted to them by their ancestors. The first instance of this apostolic zeal was the spiritual conquest of the Guanaries Indians, some of whom inhabited the banks of the rivers Uruguay and Parana; and others are near a hundred leagues up the countries N. W. of the Guayra. The Portuguese, then only intent on the improvement of their colonies, in violation of the most sacred laws, did not even after the conversion of these people, cease from making incursions,

incursions, in order to carry off the young inhabitants as slaves for their plantations; so that it became absolutely necessary, in order to preserve these converts, to remove into Paraguay, about 12,000 of all ages, and both sexes; a like number of emigrants was also brought from Tappe and formed into communities, living here in peace and safety; and at the same time in a decency becoming their new profession.

But the number of succeeding converts was so great, that continual additions were necessary to these towns, so that I was at Quito informed by a person of undoubted veracity, and thoroughly acquainted with such matters, that the number of towns of the Guaranies Indians in the year 1734, amounted to thirty-two, and supposed to contain between thirty and forty thousand families: that from the increasing prosperity of the Christian religion, they were then deliberating on the manner of building three other towns, these thirty-two being in the diocesses of Buenos Ayres, and Paraguay. Besides the Indios Chiquitos belonging to the diocess of Santa Cruz de la Sierra, there were at that time seven very populous towns; and by reason of the great resort of converted Indians, preparations were making for building others.

The Paraguay missions are on all sides terminated by nations of idolatrous Indians; some of which however live in perfect harmony with them, but others do all in their power to exterminate them by frequent incursions; and it is with the latter that the fathers chiefly employ their zeal, in order to reclaim them from their inhumanity, by preaching to them the glad tidings of the gospel. Nor is this fortitude destitute of fruit, the most rational receiving with joy the knowledge of the true God, and quitting their country, are conducted to the Christian towns, where, after proper instructions, they are admitted to baptism.

About

About a hundred leagues from the mission is a nation of idolaters called Guanoas. It is with great difficulty any of these are brought to embrace the light of the gospel, as they are extremely addicted to a licentious life; and a great number of Mestizos, and even some Spaniards, whom crimes have obliged to take shelter among them, by their ill example harden the Indians in their contempt of instruction. Besides they are so indolent and slothful, that they will not take the pains to cultivate the lands, chusing to live by the more expeditious way of hunting; and being convinced, that if they embrace the Christian religion, and submit to the missionaries, they must labour, they cannot bear to think of a change which will inevitably deprive them of their favourite indolence. Many, however, of those who come to the Christian towns to visit their relations, cannot withstand the order and decency in which they see them live, and accordingly embrace the Christian religion.

It is nearly the same with the Charuas, a people inhabiting the country between the rivers Parana and Uruguay. Those dwelling on the banks of the river Parana, from the town of Corpus upwards, and called Guananas, are more tractable, and their industry in agriculture and other rural arts, render them more susceptible of listening to the preaching of the missionaries; besides no such thing as a fugitive is to be found among them. Near Cordova is another nation of idolaters, called Pampas, who, notwithstanding they frequently come to the city to sell different productions of the earth, are very obstinate in their opinions, and, consequently, are not reclaimed without the greatest difficulty. These four nations of idolatrous Indians live, however, in peace with the Christians.

In the neighbourhood of the city of Santa Fé, situated in the province of Buenos Ayres, are others who absolutely reject all terms of peace; so that even the villages and estates near Santiago and Salta in the govern-

government of Tucuman, have felt the effects of their daring incursions. The other nations between these and the Chiquitos, and the lake of Xarayes, are little known. Not many years since some Jesuit missionaries ventured to visit their country up the river Pilcomayo, which runs from Potosi to Assumption; but their territories being very large, and living a vagrant sort of lives, without fixed habitations, the zeal of the good fathers was frustrated; as it has indeed on many other occasions, even after repeated trials.

The idolatrous Indians, who inhabit the country from the city of Assumption northward, are but very few. The missionaries have been so fortunate to meet with some of these in their journeys after them, and prevailed on them to accompany them to the Christian towns, where, without much reluctancy, they have embraced Christianity. The Chiriguanos, already mentioned, also reside in these parts; but are so infatuated with the pleasures of a savage life, that they will not hear of living under laws.

From what has been said, it will easily be conceived that the country occupied by the Paraguay missions, must be of a very great extent. The air in general is moist and temperate; though in some parts it is rather cold *. The temperate parts abound with all kinds of provisions. Cotton contributes considerably to their riches, growing here in such quantities, that every little village gathers of it annually above two thousand arobas; and the industrious are very ingenious in weaving it into stuffs for exportation. A great deal of tobacco is also planted here. But these articles are far less advantageous to the inhabitants than the herb called Paraguay, which alone would be sufficient to form a flourishing commerce in this pro-

* White frosts are very common here in July and August, sometimes they have ice about the thickness of half a crown. The former phænomenon has been seen as far to the northward as Rio de Janeiro. A.

vince,

vince, it being the only one which produces it; and from hence it is sent all over Peru, and Chili, where its use is universal; especially that kind of it called camini, which is the pure leaf; the other, distinguished by the name of palos, being less fine, and not so proper for making mate, is not so valuable.

These goods were carried, for sale, to the cities of Santa Fé, and Buenos Ayres, where the fathers have factors; the Indians, particularly the Guaranies, wanting the sagacity and address, so absolutely necessary to procure success in commercial affairs. These factors dispose of what is consigned to them from Paraguay, and lay out the money in such European goods as the towns are then in want of, in ornaments for the churches, and the decent support of the priests officiating in them. But the greatest care is taken in deducting from what each town sends, the amount of the tribute of its Indian inhabitants, which is remitted immediately to the revenue offices, without the least deduction, except the stipends for the priests, and the pensions allowed the caciques.

The other products of their lands, together with their cattle, are made use of for the subsistance of the inhabitants, among whom they are distributed with such regularity and œconomy, that the excellent police under which those people live so happily cannot be passed over in silence, without great injustice to these wise legislators.

Every town of the missions of Paraguay, like the cities and great towns of the Spaniards, are under a governor, regidores, and alcaldes. That the important office of governor may be always filled by a person duly qualified, he is chosen by the Indians, with the approbation of the priests. The alcaldes are annually appointed by the regidores, and jointly with them, the governor attends to the maintenance of good order and tranquillity among the inhabitants; and that these officers, who are seldom persons of the most shining parts,

parts, may not abuse their authority, and either through interest, or passion, carry their revenge too far against other Indians, they are not to proceed to punishment without previously acquainting the priest with the affair, that he may compare the offence with the sentence. The priest, on finding the person really guilty, delivers him up to be punished, which generally consists in imprisonment for a certain number of days, and sometimes fasting is added to it; but if the fault be very great, the delinquent is whipt, which is the most severe punishment used among them; these people being never known to commit any crime that merits a greater degree of chastisement; for immediately on being registered as converts, the greatest care has been taken in these missions, to imprint on the minds of these new Christians, a detestation of murder, robbery, and such atrocious crimes. The execution of the sentence is preceded by a discourse made by the priest before the delinquent, in which he represents to the offender, with the greatest softness and sympathy, the nature of his crime, and its turpitude; so that he is brought to acknowledge the justness of the sentence, and to receive it rather as a brotherly correction, than a punishment; so that though nature must feel, yet he receives the correction with the greatest humility and resignation, being conscious that he has brought it upon himself. Thus the priests are in no danger of any malice being harboured against them; indeed the love and veneration the Indians pay them is so great, that could they be guilty of enjoining an unjust punishment, the suffering party would impute it to his own demerits, being firmly persuaded that the priests never do any thing without a sufficient reason.

Every town has a particular armory, in which are kept all the fire-arms, swords, and weapons used by the militia, when they take the field, whether to repel the insults of the Portuguese, or any heathen Indians

dians inhabiting on their frontiers. And that they may be dexterous in the management of them, they are exercised on the evening of every holiday in the market-places of the towns. All persons capable of bearing arms in every town, are divided into companies, and have their proper officers, who owe this distinction to their military qualifications: their uniform is richly laced with gold and silver, according to their rank, and embroidered with the device of their towns. In these they always appear on holidays, and at the times of exercise. The governor, alcaldes, and regidores, have also very magnificent habits of ceremony, which they wear on solemn occasions.

No town is without a school for teaching reading, writing, dancing, and music: and in whatever they undertake they generally excel, the inclination and genius of every one being carefully consulted before they are forwarded in any branch of science. Thus many attain a very good knowledge of the Latin tongue. In one of the courts of the house belonging to the priest of every town, are shops or workhouses for painters, sculptors, gilders, silversmiths, locksmiths, carpenters, weavers, watchmakers, and all other mechanic arts and trades. Here every one works for the benefit of the whole town, under the inspection of the priests coadjutors; and boys are there also instructed in those trades and arts, to which they have the greatest inclination.

The churches are large, and well built: and, with regard to decorations, not inferior to the richest in Peru. Even the houses of the Indians are built with that symmetry and convenience, and so completely and elegantly furnished, as to excel those of the Spaniards in many towns in this part of America. Most of them however are only of mud walls, some of unburnt bricks, and others of stone; but all, in general, covered with tiles. Every thing in these towns is on such good footing, that all private houses make

gunpowder, that a sufficient quantity of it may not be wanting, either on any exigency, or for fireworks on holidays, and other anniversary rejoicings which are punctually kept. But the most splendid ceremony is on the accession of the new monarch to the Spanish throne, when the governor, alcaldes, regidores, together with all the civil and military officers, appear in new uniforms, and other ornaments, to express the ardent affection they bear their new sovereign.

Every church has its band of music, consisting of a great number both of vocal and instrumental performers. Divine service is celebrated in them with all the pomp and solemnity of cathedrals. The like is observed in public processions, especially that on Corpus Christi day, at which the governor, alcaldes, and regidores, in their habits of ceremony, and the militia in their uniforms, assist: the rest of the people carry flambeaux: so that the whole is conducted with an order and reverence suitable to the occasion. These processions are accompanied with fine dancing, but very different from that in the province of Quito, described in the first volume; and the performers wear particular dresses, extremely rich, and well adapted to the characters represented. In short, a missionary town omits no circumstance either of festivity or devotion, practised in opulent cities.

Every town has a kind of beaterio, where women of ill fame are placed, it also serves for the retreat of married women who have no families, during the absence of their husbands. For the support of this house, and also of orphans and others, who by age or any other circumstance are disabled from earning a livelihood, two days in the week are set apart; when the inhabitants of every village are obliged to sow and cultivate a certain piece of ground, called Labor de la Comunidad, the labour of the community; and the surplus of the produce is applied to procure furniture and decorations for the church, and

to

to clothe the orphans, the aged, and the disabled persons. By this benevolent plan all distress is precluded, and the inhabitants provided with every necessary of life. The royal revenues are punctually paid; and by the union of the inhabitants, the uninterrupted peace they enjoy, and the wisdom of their policy, which is preserved inviolable, these places, if there are any such on earth, are the habitations of true religion and felicity.

The jesuits, who are the priests of these missions, take upon them the sole care of disposing of the manufactures and products of the Guaranies Indians, designed for commerce; these people being naturally careless and indolent, and doubtless without the diligent inspection and pathetic exhortations of the fathers, would be buried in sloth and indigence. The case is very different in the missions of the Chiquitos, who are industrious, careful, and frugal; and their genius so happily adapted to commerce, as not to stand in need of any factors. The priests in the villages of this nation are of no expence to the crown, the Indians themselves rejoicing in maintaining them; and join in cultivating a plantation filled with all kinds of grain and fruits for the priest; the remainder, after this decent support, being applied to purchase ornaments for the churches.

That the Indians may never be in any want of necessaries, it is one part of the minister's care to have always in readiness a stock of different kinds of tools, stuffs, and other goods; so that all who are in want repair to him, bringing by way of exchange wax, of which there are here great quantities, and other products. And this barter is made with the strictest integrity, that the Indians may have no reason to complain of oppression; and that the high character of the priests for justice and sanctity may be studiously preserved. The goods received in exchange are by the priests sent to the superior

perior of the missions, who is a different person from the superior of the Guaranies: and with the produce, a fresh stock of goods is laid in. The principal intention of this is, that the Indians may have no occasion to leave their own country, in order to be furnished with necessaries; and by this means are kept from the contagion of those vices, which they would naturally contract in their intercourse with the inhabitants of other countries, where the depravity of human nature is not corrected by such good examples and laws.

If the civil government of these towns be so admirably calculated for happiness, the ecclesiastical government is still more so. Every town and village has its particular priest, who in proportion to its largeness, has an assistant or two of the same order. These priests, together with six boys who wait on them, and also sing in the churches, form in every village a kind of small college, where the hours are under the same regulation, and the exercises succeed each other with the same formalities as in the great colleges of cities. The most laborious part of the duty belonging to the priest, is to visit personally the chacaras or plantations of the Indians; and in this they are remarkably sedulous, in order to prevent the ill consequences of that slothful disposition so natural to the Guaranies; who, were they not frequently roused and stimulated by the presence of the priest, would abandon their work, or, at least, perform it in a very superficial manner. He also attends at the public slaughter-house, where every day are killed some of the cattle; large herds of which are kept for the public use by the Indians. The flesh of these beasts are dealt out by the priest, in lots proportionable to the number of persons each family consists of; so that every one has a sufficiency to supply the calls of nature, but nothing for waste. He also visits the sick, to see that they want for nothing.

nothing, and are attended with that care and tenderness their state requires. These charitable employments take up so great a part of the day, as often to leave him no time for assisting the father coadjutor in the services of the church. One useful part of the duty of the latter is to catechize, and explain some portion of scripture in the church every day in the week, Thursdays and Saturdays excepted, for the instruction of the young of both sexes; and these in every town are not less than two thousand. On Sundays all the inhabitants never fail to attend divine service. The priest also visits the sick to confess them; and if the case requires it, to give them the viaticum; and to all these must be added the other indispensable duties of a priest.

By the strictness of the law these priests should be nominated by the governor, as vice-patron, and be qualified for their function by the consecration of the bishop; but as among the three persons recommended on such occasions to the governor, there will of consequence be one, whose virtues and talents render him most fit for the office; and as no better judges of this can be supposed than the provincials of the order, the governor and bishop have receded from their undoubted rights, and the provincials always collate and prefer those whose merits are most conspicuous.

The missions of the Guaranies are also under one superior, who nominates the assistant priests of the other towns. His residence is at Candelaria, which lies in the centre of all the missions; but he frequently visits the other towns, in order to superintend their governments; and at the same time, concerts measures that some of the fathers may be sent among the heathen Indians, to conciliate their affections, and by degrees work their conversion. In this important office he is assisted by two vice-superiors, one of whom resides at Parana, and the other on the river Uruguay.

All

All these missions, though so numerous and dispersed, are formed as it were into one college, of which the superior may be considered as the master or head; and every town is like a family governed by a wise and affectionate parent, in the person of the priest.

In the missions of the Guaranies, the king pays the stipends of the priests, which, including that of the assistant, is three hundred dollars per annum. This sum is lodged in the hands of the superior, who every month supplies them with necessary food and apparel, and on any extraordinary demand, they apply to him, from whom they are sure of meeting with a gracious reception.

The missions of the Chiquito Indians have a distinct superior; but with the same functions as he who presides over the Guaranies; and the priests also are on the same footing, but have less anxiety and labour; the industry and activity of these Indians, saving them the trouble of coming among them to exhort them to follow their employments, or of being the storekeepers and agents in disposing of the fruits of their labours; they themselves vending them for their own advantage.

All these Indians are very subject to several contagious distempers; as the small-pox, malignant fevers, and others, to which, on account of the dreadful havock attending them, they give the name of pestilence. And to such diseases it is owing, that these settlements have not increased in a manner proportional to their numbers, the time since their establishment, and the quietness and plenty in which these people live.

The missionary fathers will not allow any of the inhabitants of Peru, whether Spaniards, or others, Mestizos, or even Indians, to come within their missions in Paraguay. Not with a view of concealing their transactions from the world; or that they are afraid lest others should supplant them of part of the products

products and manufactures; nor for any of those causes, which even with less foundation, envy has dared to suggest; but for this reason, and a very prudent one it is, that their Indians, who being as it were new born from savageness and brutality, and initiated into morality and religion, may be kept steady in this state of innocence and simplicity. These Indians are strangers to sedition, pride, malice, envy, and other passions, which are so fatal to society. But were strangers admitted to come among them, their bad examples would teach them what at present they are happily ignorant of; but should modesty, and the attention they pay to the instructions of their teachers, be once laid aside, the shining advantages of these settlements would soon come to nothing; and such a number of souls, who now worship the true God in the beauty of holiness, and live in tranquillity and love (of which such slender traces are seen among civilized nations), would be again seduced into the paths of disorder and perdition.

These Indians live at present in an entire assurance, that whatever their priests advise them to is good, and whatever they reprehend is bad. But their minds would soon take a different turn, by seeing other people, on whom the doctrine of the gospel is so far from having any effect, that their actions are absolutely repugant to its precepts. At present they are firmly persuaded, that in all bargains and other transactions, the greatest candour and probity must be used, without any prevarication or deceit. But it is too evident, that were others admitted among them, whose leading maxim is to sell as dear, and buy as cheap as they are able, these innocent people would soon imbibe the same practice together with a variety of others which seem naturally to flow from it. The contamination would soon spread through every part of their behaviour, so as never more to be reclaimed. I do not here mean to lessen the characters

tors of those Spaniards or inhabitants of other nations, whose countries are situated conveniently for trading with Paraguay, by insinuating that they are universally fraudulent and dissolute: but, on the other hand, among such numbers, it would be very strange if there was not some; and one single person of such a character would be sufficient to infect a whole country. And who could pretend to say, that, if free admisson were allowed to foreigners, there might not come in, among a multitude of virtuous, one of such pestilent dispositions? Who can say that he might not be even the very first? Hence it is that the Jesuits have inflexibly adhered to their maxim of not admitting any foreigners among them: and in this they are certainly justified by the melancholy example of the other missions of Peru, whose decline from their former happiness and piety is the effect of an open intercourse.

Though in the several parts of Paraguay, where the missions have been always settled, there are no mines of gold and silver; several are to be found in some adjacent countries under the dominion of the king of Spain; but the Portuguese reap the whole benefit of them: for having encroached as far as the lake Xarayes, near which, about twenty years ago, a rich mine of gold was discovered; they without any other right than possession, turned it to their own use: the ministry in Spain, in consideration of the harmony subsisting between the two nations, and their joint interest, forbearing to make use of any forcible methods.

V. Bishoprick of the audience of Charcas.

Buenos Ayres.

The ecclesiastical jurisdiction of the bishop of Buenos Ayres extends to all the countries under the temporal government of the same name; and this begins on the oriental and southern coast of that part of America, and extends westward as far as Tucuman;

man; on the N. it terminates on Paraguay, and is bounded towards the S. by the land of Magellan. Its countries are watered by the great river de la Plata, the discovery of which was owing to Juan Dias de Solis, who, in 1515, having sailed from Spain with two vessels to make discoveries, arrived at the mouth of this river, and took possession of it in the name of the king of Spain. But being unhappily deluded by the signs of joy and friendship made by the Indians, he landed, and was immediately killed, together with his few attendants. The same voyage was repeated in 1526 under Sebastian Cabot, who entering the river, discovered an island, which he called St. Gabriel; and advancing further, came to another river, which emptied itself into that of La Plata; to this he gave the name of St. Salvador, causing his fleet to enter the river, and there disembark their troops. Here he built a fort, and leaving in it a part of his men, he sailed above two hundred leagues up the river Parana, discovering also that of Paraguay. Cabot, having purchased some ingots of silver from the Indians he met with, and particularly from the Guaranies, who brought the metal from the other parts of Peru, imagined that they had found it in the neighbourhood of the river, and thence called the river Rio de la Plata, or Silver River, which has superseded that of Solis, as it was before called from its first discoverer, whose memory is still preserved by the little river Solis, about seven or eight leagues W. of Maldonado-bay.

The capital of this government is called Nuestra Senora de Buenos Ayres. It was founded in the year 1535 by Don Pedro de Mendoza, pursuant to his orders, which also appointed him governor. He chose for it a place called Cape Blanco, on the S. side of Rio de la Plata, close by a small river. Its latitude, according to father Feville, is 34°, 34′ 38″, S. He gave it the name of Buenos Ayres, on account of the extreme salubrity of the air. The

city is built on a large plain, gently rising from the little river. It is far from being small, having at least three thousand houses, inhabited by Spaniards and different casts. Like most towns situated on rivers, its breadth is not proportional to its length. The streets are however straight, and of a proper breadth. The principal square is very large, and built near the little river; the front answering to it, being a castle where the governor constantly resides; and, with the other forts, has a garrison of a thousand regular troops. The houses, formerly of mud walls, thatched with straw and vry low, are now much improved, some being of chalk, and others of brick, and having one story besides the ground floor, and most of them tiled *. The cathedral is a spacious and very elegant structure, and is the parish church for the greatest part of the inhabitants; the other at the farther end of the city being only for the Indians. The chapter is composed of the bishop, dean, archdeacon, and two canons, one by composition, the other by presentation. Here are also several convents, and a royal chapel in the castle where the governor resides. With regard to the civil and œconomical government, and the magistracy, it will be unnecessary to enter into particulars, they being on the same footing as those of the places already mentioned.

The climate here is very little different from that of Spain; and the distinctions between the seasons are the same. In winter indeed violent tempests of winds and rain are here very frequent, accompanied with such dreadful thunders and lightnings, as fill the inhabitants, though used to them, with terror and consternation. In summer the excessive heats are mitigated by gentle breezes, which constantly being at eight or nine in the morning.

* Their houses are commonly thatched with cocoa-nut leaves and flags. A.

The

The city is surrounded by a spacious and pleasant country, free from any obstruction to the sight; and from these delightful fields, the inhabitants are furnished with such a plenty of cattle, that there is no place in America or Europe where meat is better or cheaper. It is the usual custom to buy the hides of the beast, the carcase being in some measure a gratuitous addition; and the meat is always fat and very palatable. The country to the W. S. and N. of Buenos Ayres, lately abounded so greatly in cattle and horses, that the whole cost consisted in taking them; and even then a horse was sold for a dollar of that money, and the usual price of a beast, chosen out of a herd of two or three hundred, only four rials. At present there is no scarcity, but they keep at a greater distance, and are more difficult to be catched, by reason of the prodigious havock made of them by Spaniards and Portuguese, merely for the sake of their hides; the grand commerce of Buenos Ayres.

All kinds of game and fish are also here in the same plenty; several sorts of the latter being caught in the river running by it; but the pexereyes are very remarkable, some of them being half a yard or more in length. Both the American and European fruits come to full perfection, and are in great plenty. In a word, for the enjoyments of life, especially with regard to the salubrity of the air, a finer country cannot be imagined.

This city is situated about seventy-seven leagues from Cape Santa Maria, which lies on the N. coast near the entrance of the river de la Plata; and its little river not having water sufficient for ships of burden to come up to Buenos Ayres, they anchor in one of the two bays on the same coast. That farthest to the eastward is called Maldonado, and is nine leagues from the above cape: the other bay is, from a mountain near it, named Monte-Video, and is about twenty leagues from it.

Within

Within the government of Buenos Ayres, are three other cities, namely, Santa Fè, las Corientes, and Monte-video. The last, which was lately built, stands on the border of the bay, from whence it derives its name. Santa Fè, lies about ninety leagues N. W. of Buenos Ayres, between the Rio de la Plata, and the Rio Salado, which after running through the country of Tucuman, joins the former. The city is but small, and meanly built; owing in a great measure, to the insults it has frequently suffered from the heathen Indians, who not long since pillaged it, massacring the inhabitants of the city, and those of the neighbouring villages; and they still keep the country under continual apprehensions of another visit. It is however the channel of the commerce between Paraguay and Buenos Ayres, for the herb camini and palos. The city de las Corientes, situated on the eastern banks of the river de la Plata, betwixt it and the river Parana, is about a hundred leagues N. of the city of Santa Fè. Its magnitude and disposition are both inferior to Santa Fè, and indeed has no marks of a city except the name. Each of these cities has its particular corregidor, as lieutenant of the governor; and its inhabitants, together with those of the neighbouring country, are formed into a militia, which on any appearance of an invasion from the Indians, assemble, and have often shewn a great deal of resolution in repelling the attacks of their pagan enemies. It has already been observed, that part of the towns of the missions of Paraguay belong to this diocess, and with regard to the royal jurisdiction, these missions universally depend on Buenos Ayres; those which formerly belonged to the government of Paraguay having been separated from it.

Having thus with the government of Buenos Ayres, finished my account of every thing worthy of notice in the audiences of Lima and Charcas, together with the jurisdictions included in their dio-

cesses,

cesses, it now remains only to conclude my description of the kingdom of Peru, with an account of the kingdom and audience of Chili; but the many objects of importance in it so well deserves to be fully treated of, that I thought proper to reserve them for the following book; those included in this, as I have mentioned in its place, merited a much greater prolixity; for from what has been said in the first volume of the province of Quito, some idea of the difference between the two with regard to the number of people, towns and villages, trade and commerce, may be conceived; the province of Quito having only one diocess, and part of another; whereas Lima contains one archbishoprick, and four bishopricks; and that of Charcas one bishoprick more than that of Lima. In the province of Quito only a few mines are worked, and those to little advantage; whereas the mines of Lima and Charcas, by their immense riches, draw thither great numbers of traders and industrious people, and thus spread wealth and affluence through the whole country, by the brisk circulation of trade. It must however be owned, that the number of people in these provinces bear no proportion to their extent; and it is with too much truth said, that they are in many places almost destitute of people; for supposing a corregidor to have twenty villages under his jurisdiction; yet if the least extent of it be thirty leagues one way, and fifteen another, they must be very thin. For draw a parallelogram of that dimension, it will contain 450 square leagues of ground, and consequently the share of each village will be twenty-two square leagues and a half. This calculation is made from the smallest distances, there being jurisdictions of a far greater extent; and others, which, though equal in dimensions, have not twenty villages. What has been said of the products and manufactures in each jurisdiction must be understood

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in a general sense, we not having entered into many particulars made or produced in some towns, and not common to others; as may be observed in the description of Quito. But these accounts drawn from our own experience, and the relations of persons of undoubted veracity, we hope will not prove unacceptable to the reader, who is desirous of forming a true idea of these parts, which for their riches, fertility, prodigious extent, and many other particulars, merit the greatest attention; especially for the amazing success which has attended the propagation of the christian religion, in countries formerly involved in ignorance and inhumanity.*

* It is supposed, that the kings of Spain and Portugal have five times the number of subjects in their American settlements than in their respective kingdoms. Notwithstanding which you may travel in America twenty leagues together, and not see a hut, except you are in the neighbourhood of some of the great towns: so great are the tracts of land possessed by each prince. A.

BOOK VIII.

Return from Lima to Quito: Voyage from Callao to Guayaquil, for putting that City in a Posture of Defence against the Attack apprehended from the English Squadron, under Commodore Anson. Second Voyage to Lima, and from thence to the Island of Juan Fernandes, and the Coast of Chili: with an Account of that Kingdom, and the adjacent Sea, and return to the Port of Callao.

CHAP. I.

Voyage from Callao to Paita, with nautical Remarks.

THE time of our stay at Lima and Callao was taken up in the diligent execution of several commissions with which the viceroy had been pleased to honour us, for putting the coasts and other parts of that kingdom in the best posture of defence; that in case an English squadron should make any attack,* so a vigorous resistance might discourage any farther attempt of that nature. Having made the necessary dispositions to the viceroy's satisfaction, and four men of war which had been sent at the beginning of the summer to cruize off the coast of Chili, in order to attack the English squadron at their first appearance, being returned without the least information of any foreign ships having been seen in those seas; and the season of

* At this time Spain and England were at war.

the

the year now inclining to winter, when every one was of opinion, that it was utterly impracticable for Mr. Anson and his ships to get round Cape Horn that year, if (as indeed we concluded) he had not already performed it; we desired leave, as our longer stay could be of no service, to return to Quito, in order to prosecute the original design of our voyage. This leave, we, with some difficulty, obtained; by reason of the great want of officers in Peru, and the certain advice the viceroy received, that the Spanish squadron, under the command of Don Joseph Pizarro, had not been able to get round Cape Horn. But at length, convinced that our stay would greatly retard the execution of his majesty's particular commands, and confident that on any sudden exigency he would find the same alacrity in us to obey his orders, he was pleased to grant our request, and dismissed us in the most polite manner.

There happened at this time to be one of the largest merchant ships trading in the South seas, at Callao, just ready to sail for Guayaquil, called the Chaldas. On board this ship we embarked on the 8th of August 1741, and on the 15th of the same month anchored at Paita; continued our voyage from thence on the 18th, and on the 21st entered the harbour of Puna. We immediately set out for Guayaquil, and from thence continued our journey for Quito, which we reached on the 5th of September.

The course generally steered from Callao to Paita, is first W. N. W. till the ships are past the Feralones* of the island of Guara. From thence N. W. and N. W. one quarter northerly, to a latitude a little beyond the outermost island of Lobos, or Wolves. Afterwards they steer N. and N. E. till they make the continent within them, and which is continued in sight

* The Feralones are two old walls on the island of Guara, and serve as light-houses.

till they arrive at the port of Paita; being very careful to keep at a proper distance from Ogujia, which is very low, and projecting a great distance into the sea. Accordingly cautious navigators, after passing the islands of Lobos, steer a north course till they get sight of that of Nonura.

The land of this whole coast is low; but there are two signs which evidently indicate its being near. First the sea-wolves, which are seen near these islands, and at three or four leagues distant from them. The second is the great flocks of birds all along this coast, flying two or three leagues from the shore, in quest of food. And though fogs are very frequent here, and so thick as to hide the land, yet its distance may be nearly known from these signs in the day-time; but at night more circumspection is necessary on account of the extreme lowness of the shore. And though the islands of Lobos are something higher than the coast, too much caution cannot be used in approaching them.

It is common in this voyage if the ship is intended to touch at Paita, and has not had sight of the islands of Lobos in the day-time, when in their latitude, to lie-to all night But if they do not propose to stop at Paita, proper attention must be given to the course, and the voyage continued. If the ship be bound to Paita, there is a necessity for making these islands, or the continent near them to the N. in order to avoid being carried beyond the port by the currents; as in such a case a great deal of time would be lost in getting back, both the wind and currents being contrary.

From Paita, the coast is always kept in sight; but a careful look out is necessary in order to discover the Negrilos, rocky shoals, projecting four or five leagues distant from the shore, and lying betwixt Paita and Cape Blanco, one of the points of Guayaquil bay. The winds during this whole passage are usually S. but

in the summer, that is, from November to May, sometimes veer as far as S. E. Near the coast is a periodical morning breeze, or faint easterly wind, which shifts round to the S. E. or S. S. E. and in this season, at any distance from the coast, the S. winds are also faint; nor are calms uncommon, though they are of short continuance; but the brisas never reach so far: and this renders the voyage from Paita to Callao so very long in all seasons. For if a ship stretches out to a great distance from the coast, the winds, even within ten or twelve leagues, shift from S. to S. W. but if she keeps along the shore, and endeavours to perform her voyage by tacking, she loses on one what she gained on another. Besides, during the winter the currents set strongly towards the N. or N. W. and consequently render the voyage still more tedious. In summer there is here generally no current, or if any do set to the northward, it is scarcely perceived; the direction of the current in that season being generally W. This proceeds from the brisas blowing from the N. of the equator, though they are unable to change the set of the current to the S. as would be the natural consequence, were it not for the resistance it meets with from the waters agitated by the S. winds to the southward of the equinoctial; but by meeting each other they run towards the W. There are, however, some short intervals during the summer, when the currents suddenly change their direction, and run to the southward, but at no great distance from the shore; and in the same instantaneous manner shift about to an opposite point; and this is the reason why most ships coming from Paita to Callao in this season keep near the shore, and work up to windward, hoping, by the favourable change of the currents, to acquire that assistance which the winds deny.

At all times this voyage is of a most disagreeable and fatiguing length; for though the distance according to the latitude of these ports, be only 140 leagues, a ship

ship is very fortunate to perform it in forty or fifty days; and if even after spending that time in continual labour, she be not obliged to return again to Paita: such accidents being very common; and it is nothing extraordinary to meet with two or three misfortunes of the same kind successively, especially if the ships make a great deal of lee-way, when it is often a twelvemonth's task. They relate here a story to this purpose, that the master of a merchant ship, who had been lately married at Paita, took his wife on board with him, in order to carry her to Callao. In the vessel she was delivered of a son, and before the ship reached Callao, the boy could read distinctly. For after turning to windward, two or three months, provisions growing short, the master put into some port, where several months were spent in procuring a fresh supply; and after another course of tacking, the same ill fortune still pursued him; and thus four or five years were spent in tacking and victualling to the ruin of the owner, before the ship reached Callao. This misfortune was in a great measure owing to the ill construction of the ship; and every other circumstance tending to obstruct her passage, the transaction has nothing very wonderful in it.

According to observations made by Don George Juan at Paita, in the year 1737, its latitude is 5° 5′ S. It is a small place, having only one street, and about 172 houses; and these only of quinchas and canes covered with leaves; the only house built of stone being that of the governor. It has a parish church and a chapel dedicated to Our Lady of Mercy, and served by a religious of that order. A little to the southward of the town is a mountain, called from its figure Silla de Paita, or the saddle of Paita. The soil round Paita is wholly of sand, and extremely barren; for besides the total want of rain, it has not a single river for the conveyance of water; so that it is entirely destitute of that necessary fluid, unless what

is daily brought with great fatigue from Colan, a town on the same bay, four leagues N. of Paita, and near which runs the river Chera, the same stream which waters Amotape. The Indians of the town of Colan are under an obligation of daily sending to Paita, one or two balzes loaded with water, which is distributed among the inhabitants by stated proportions. From the same town Paita has also the greatest part of its provisions. The nature of the soil, and the situation of the place, render it extremely hot. Its inhabitants who are about thirty-five or forty families, and consist of Spaniards, Mulattoes, and Mestizos, live, chiefly by passengers going or returning from Panama to Lima. So that the town owes its whole support to the harbour, which, as I have before observed, is the place where the cargoes of goods sent from Panama are landed, together with those coming from Callao to the jurisdictions of Piura and Loja.

In the bay of Paita, and that of Sechura, which lies a little farther to the southern, such large quantities of tollo are taken as to answer the demands of the provinces of the mountains, and part of those of Quito and Lima. The season for this fishery begins in October, when great numbers of barks go from Callao, returning when the season is over. Fishing is also the constant employment of the Indians of Colan, Sechura, and the small hamlets near the coast; these seas abounding in several kinds of fish, besides the tollo, all palatable, and some delicious.

CHAP.

CHAP. II.

Account of the Transactions at Quito: unhappy Occasion of our sudden Return to Guayaquil.

ON our arrival at Quito, we made it our first business to join the French company, who were pleased to express a great deal of joy at our return. Mr. Godin, during our absence, had finished the astronomical observations to the northward, and though Messrs. Bouguer and de la Condamine, had also gone through them, yet they still purposed to repeat them; for these able academicians, who had always shewn an indefatigable zeal for the perfection of the work, were particularly attentive in observing the greatest obliquity of the ecliptic; at which observations we also assisted; but several accidents hindered them from being carried on without interruption. They therefore thought it most agreeable to their character, and the commission with which they had been honoured, to spend some more time in ascertaining this important point, than to leave the country before their observations were completed. Notwithstanding their stay was attended with so much inconvenience and fatigue, they could not think of leaving, undetermined, a difficulty occasioned by a certain motion which they observed in the stars. In order to ascertain with the greater accuracy the quantity of the arch, they divided themselves into two companies, Bouguer being at the head of one, and M. de la Condamine accompanied by M. Berguin, at that of the other; the latter, while the geometrical mensuration was carrying on, applied himself with indefatigable labour, and admirable skill, in drawing maps of the country, in order to erect the signals in the most advantageous places. He also assisted both companies

in

in their mensurations of the two bases, which served to prove the accuracy of the operations. And, lastly, he was present at making the astronomical observations. But before the repetition was undertaken, M. de la Condamine employed himself in erecting two obelisks at the extremities of the base of Yaruqui, as monuments of this transaction: this spot having been the foundation of the whole work. Various were the sentiments with regard to the inscription proper to be engraved on them; and indeed the difficulties attending this particular, seemingly of no great importance, were such, as could not be removed till the affair was entirely dropt, on account of other things of real concern, and which would admit of no delay. It was however unanimously concluded, that the whole affair should be referred to his majesty's pleasure after our arrival in Spain. Accordingly in the year 1746, the marquis de la Ensenada, equally distinguished as a statesman, and a patron of real knowledge, being at that time secretary of state for the Indies, sent over, in his majesty's name, the following inscription:

Philippo V.
Hispaniarum, & Indiarum Rege Catholico,
Ludovici XV.
Regis Christianissimi Postulatis, Regiæ Scientiarum
Academiæ Parisiensis
Votis Annuente, ac Favente,
Ludov. Godin, Petrus Bouguer,
Car. Maria de la Condamine,
Ejusdem Academiæ Socii,
Ipsius Christianissimi Regis Jussu, & Munificentia,
Ad Metiendos in Æquinoctiali Plaga
Terrestres Gradus,
Quo vera Terræ Figura Certius Innotesceret,
In Peruviam Missi;
Simulque
Georgius

Georgius Juan, S. Johannis Hierosolymitani Ord. Eques, &
Antonius de Ulloa,
Uterque Navium Bellicarum Vice-præfecti, et Mathematicis Disciplinis Eruditi,
Catholici Regis Nutu Auctoritate Impensa ad ejusdem mensionis Negotium eodem allegati Communi Labore, Industria, Consensu in hac Yaruquensi Planitie distantiam Horizontalem 6272 $\frac{551}{726}$ Paris. Hexapedarum,
In Linea a Borea Occidentem versus grad. 19 min. 25 $\frac{1}{2}$ intra hujus & alterius Obelisci Axes Excurrentem,
Quæque ad Basim primi Trianguli Latus Eliciendam & Fundamenti Toti Operi jaciendum inserviret, statuere,
Anno Christi MDCCXXXXVI. Mense Novembri.
Cujus Rei Memoriam duabus hinc inde Obeliscorum molibus extructis Alternum consecrari placuit

" In the reign of his Catholic Majesty, Philip V. " king of Spain and the Indies; agreeable to the " request of his most Christian Majesty Lewis XV. " king of France, and in condescension to the de- " sire of the royal academy of Sciences at Paris, " Lewis Godin, Peter Bouguer, Charles Maria de " la Condamine, Members of that academy, were, " by the command and munificence of the most " Christian king, sent into Peru, to measure the " terrestrial degrees under the equinoctial, in order " to obtain a more accurate knowledge of the true " figure of the earth. At the same time, by the " command, and at the expence of his Catholic ma- " jesty, were sent, George Juan, knight of the " order of St. John of Jerusalem, and Antonio de " Ulloa, both Lieutenants in the royal navy, and " well acquainted with all the branches of the ma- " thematics: during the whole process of this men- " suration they all equally shared in the fatigues, hardships,

" hardships, and operations; and with an unani-
" mous consent determined in this plain of Yaruqui
" a horizontal distance of 6272 $\frac{55}{72}$ Paris toises in
" a line whose direction was N. 19° 25′ 30″ westerly,
" and intercepted between the axes of this and the
" other obelisk, as the base or side of the first tri-
" angle, and a foundation for the whole work. In
" the month of November, 1736. In the memory of
" which transaction an obelisk has been erected at
" each extremity of the said base."

We had now been three months at Quito, waiting till Mr. Hugot, instrument-maker to the Company, had finished some indispensable works in which he was then employed, that he might accompany us to the place where M. Godin, after finishing the observations, had left the instrument, which required some repairs in order for our making use of it in finishing our part of the work. But on the 5th of December, 1741, when we were animated with the hopes of concluding our task in two or three days, the melancholy news arrived at Quito, that Paita had been pillaged and burnt by a squadron of men of war, commanded by Commodore Anson; and was too soon confirmed in all its circumstances, by letters from the corregidor and other officers of Piura, giving an account that on the 24th of November, at two in the morning, the Centurion man of war, being the Commodore's ship, had entered that harbour, and sent her long-boat a-shore with forty armed men, under the advantage of the night, whereby the inhabitants and strangers who happened to be in the place, were awaked from their sleep by the shocking surprize of an invasion, the first notice of which were given by the cries of a negro; so that filled with confusion and terror, like persons unable to recollect themselves, most of them had leaped from heir beds, and fled naked from their houses, without knowing whether their enemies were in possession of

of the town; or whether, by a vigorous resistance they might not be repelled; the mind, on so great and sudden a perturbation, being but little capable of such reflections.

Not so Don Nicholas de Salaza, the accomptant of Piura, who happened to be then at Paita, on some affairs of his office. This gentleman, attended only by a negro slave, with an equal presence of mind and resolution, threw himself into the little fort, built for the defence of that small town, and fired two or three shot towards the place where he heard the noise of the oars. Upon this the long-boat stopped; but the fort was obliged to give over firing for want of hands to assist an officer who had shewn so generous an example of resolution. The English, concluding very naturally, that the fort was also abandoned, landed about half a league N. of the town, to which they immediately marched, and finding it forsaken, entered the fort, where, for fear of any surprize, they kept themselves all night. But the inhabitants thought of nothing but saving their lives, and accordingly fled to a mountain, betwixt the Silla and the town, where they concealed themselves, except a few slaves, who finding that the enemy were all retired into the fort, took the advantage of the night, and boldly returned into the town, bringing off such arms and effects of their masters as the night would permit, hiding in the sand what they found too heavy to carry up to the top of the mountain.

There was unfortunately then at Paita great quantities of meal, fruits, and brandy, consigned to the provinces of the mountains, by the way of Piura; besides other goods deposited in the warehouses to be sent to Panama. There was also no small quantity of gold and silver. As soon as daylight returned, the English left their retreat, and seeing every place forsaken, they began to enter the houses,

houses, which are so many magazines for goods. It was not long before they met with a quantity of brandy and wine, of which, like men whose appetites are not to be governed at the sight of plenty after long distress, they made a very licentious use, and became so greatly inebriated, that the mulattoes and negro slaves, seeing their condition, abandoned their fears, and became so familiar with the English sailors, as to drink with them, whilst others carried off hampers filled with the goods of their masters, together with considerable quantities of gold, which they buried in the sand. The long-boat, however, returned on-board the ship, but her chief spoils consisted of provisions; and the men employed in that service, regaled themselves with a degree of intemperance equal to those who guarded the fort.

The inhabitants of Paita, who still timorously continued on the mountain, though in want of every thing, dispatched an express to Don Juan de Vinatea y Torres, the corregidor of Piura, and a native of the Canaries, who, agreeably to his known character of prudence and intrepidity, immediately assembled all the militia of that city and its dependencies, and hastened by forced marches through a troublesome sandy road of fourteen leagues to Paita. The English had been three days masters of Paita, when discovering these succours, and being informed by the negroes and mulattoes, that the militia of Piura, headed by a famous general, were coming to dislodge them from the town, enraged at this, but wanting courage to defend what they had gained, or rather surprized, carried off whatever they could, and took their leave of the place by ungenerously setting fire to the houses; an action which could reflect but little honour on the arms of their nation: but was rather a malicious transaction, to revenge on the poor inhabitants the coming of the militia, whom they did not dare to face. Nobody indeed imagined

imagined at that time that this proceeding was in consequence of any orders issued by the commander, and it was afterwards known that he was under great concern for such unjustificable behaviour.

The corregidor of Piura, as he had been very active in the defence of Paita, so he lost no time in sending advice of the descent to the corregidor of Guayaquil, that he might put that city in a posture of defence; it being natural to suppose, that the English would also make an attempt there, as it had always been attacked by every enemy who before infested those seas. Accordingly the inhabitants of Guayaquil were soon in arms, and the best measures taken with the utmost expedition. But the force of the enemy being uncertain, no other ship having been seen at Paita than that which entered the port, the corregidor and magistrates applied for assistance to the president and audience of Quito; who among other measures for securing Guayaquil from the rage of the English, required us, in his majesty's name, to repair immediately to that city, and take upon us the command of the troops, all the jurisdictions having received orders to send their contingencies; and to direct the works to be raised, and the trenches necessary to be thrown up in the places most advantageous and most exposed.

As affairs of this nature admit of no delay, we immediately prepared for the journey, and leaving Quito the 13th of December, arrived at Guayaquil on the night of the 24th. But the passage of the mountains was inconceivably fatiguing; the natural difficulty and badness of the roads, it being the beginning of winter, having been greatly increased by the violent rains.

Having gone through all the necessary operations, and taken the most proper measures to defeat the attempts of an enemy, and such as we had the pleasure of seeing approved by the council of war held

held in that city, our longer stay only hindered the conclusion of our grand design, and was of no further use here, especially as it was then certainly known that the enemy's squadron had sailed for Manta, the coasts of which, though in the jurisdiction of Guayaquil, are nearly twenty-eight leagues N. of that city, and consequently to leeward of it. It was also known that the fleet intended to proceed from Manta to Acapulco. Impatient at the loss of time we applied to the same council of war, who were pleased to grant leave for one of us to return to Quito, in order to complete the observations still remaining, that on any subsequent exigency we might be the more disengaged; but at the same time thought it necessary that one of us should continue on the spot to act on any sudden emergency. The matter was soon agreed on between Don George Juan and myself, namely, that he should remain as commandant of Guayaquil, while I returned to continue the observations at Quito. But before I proceed, it will not be amiss to give an account of the transactions of the enemy's squadron in those seas, according to the depositions of some prisoners whom they set ashore at Manta.

This squadron, at its entrance into the South sea, besides being dispersed, was in a very shattered condition; but arrived successively at the island of Juan Fernandes, to the number of four ships, from fifty to sixty guns, the Centurion and the Gloucester, a frigate between thirty-six and forty guns, and a victualler. These ships came to an anchor close to the shore, their crews being very much diminished, and those which remained very sickly. Tents were pitched, a kind of village built with an hospital for the recovery of their men. They arrived at this island in the month of June, and the commander was so quick in his prosecution of hostilities, that as soon as a number of sailors sufficient to man the frigate were recovered,

covered, she was sent out on a cruize; and this being in the common track of ships bound from Callao to the coast of Chili, they had the good fortune to take two or three, all of them richly laden, particularly the Aranzaza, one of the largest employed in these seas. Great numbers of men died on the island of Juan Fernandes, but on the recovery of the remainder, and the ships being careened, they sunk the victualler, and some time after the frigate, putting the guns and provisions on board the Aranzaza. After this the whole squadron put to sea upon fresh enterprizes, and about eight or nine vessels fell into their hands; and between Paita and the island of Lobos, they took a coast ship of great value. The sacking of Paita was the last act of hostility they committed in these parts; for the English commodore having procured intelligence of the short time requisite to alarm Guayaquil, and finding that there had been abundantly more than sufficient, prudently abandoned a design, against which he judged insuperable precautions had been taken; and indeed had he made an attempt, in all probability those spirits would have been depressed, which were so greatly elevated at their success at Paita.

After leaving Paita they steered for the coast of Manta, where they put the prisoners they had taken in the merchant ships on board a long-boat, to make the best of their way to the land; the ships keeping ten or twelve leagues from the shore; but many of the sailors, negroes, and mulattoes, who had nothing to lose, voluntarily entered with them. They now determined to sail for the Philippines, in order to intercept the galleon in her return to those islands, and which was to sail from Acapulco some time in January. This was doubtless the most advantageous scheme that could be formed in their circumstances. But in this they were disappointed by the viceroy of Mexico; who, from the intelli-

gence sent by the viceroy of Peru to all the ports on the coast of the south-sea, as well as by expresses dispatched from Guayaquil and Atacames to Panama, deferred sending the ship that year; which the enemy being apprized of, they burnt the Aranzaza, as they had before the other prizes, and continued their voyage towards the Philippines, where by a long perseverance in a most tedious cruize they accomplished their design. For the Acapulco ship returning when all the danger was imagined to be over, fell in with the Centurion, and after a short, though smart engagement, was taken.

But to reassume the thread of the narrative, to which I hope this has been no disagreeable interruption. On the fifth of January 1742, I set out from Guayaquil for Quito, being the very worst time of the year for performing that journey; and as such I experienced it by several misfortunes. In one of the rivers we were obliged to ford, the two mules which first entered were swept away by the current, and that which carried my portmanteau was lost; and the other, on which an Indian rode and led the former, swam with great difficulty to the shore, and the Indian saved himself by holding fast by the creature's tail; in which manner they were carried near a quarter of a league below the ford. If the travelling up the mountains was not attended with such eminent danger, it was extremely troublesome, a space of about half a league having taken me up from seven in the morning till seven in the afternoon, the mules though light falling at every step, nor was it an easy matter to make them rise. And soon after the creatures became so fatigued, they even sunk under their own weight. At length I reached Quito on the nineteenth of the same month; but had hardly alighted from the mules with the hopes of resting myself after these dangers and fatigues, when the president informed me,

me, that three days before he had sent away an express, with letters from the viceroy, directing us to hasten to Lima, with all possible expedition; and charging him in particular to provide immediately every thing necessary that our journey might not be a moment delayed. It was therefore no time to think of rest; and accordingly after making such provisions as were absolutely necessary, I set out on the 22d of the same month, and a third time crossed that difficult mountain in my way to Guayaquil where having joined Don George Juan, who was included in the orders, we travelled night and day, with a dispatch answerable to the governor's impatience, all the towns on the road having received orders to keep beasts in readiness, that we might not be detained a moment; and accordingly we reached Lima the 26th of February. In the mean time the viceroy had ordered a squadron of four men of war to sail from Callao to Panama, for the defence of that place, which touched at Paita, in order to gain intelligence of the enemy's ships, having orders to attack them if possible; but as we have already observed, they were sailed to the coast of Acapulco. On our arrival the viceroy was pleased to express great satisfaction at our dispatch, and to honour us with several commissions suitable to the exigence of affairs; giving us the command of 2 frigates which he had ordered to be fitted out for the security of the coast of Chili, and the island of Juan Fernandes, against any reinforcement coming to the enemy. For though commodore Anson had made no secret of his intentions to the prisoners, and they had eagerly published them, no dependance could be had on informations given out by the enemy himself, and which were the more suspicious as he told them openly. Besides it was well known, that this squadron originally consisted of more ships; and we were apprehensive, that though the remainder had

failed

failed of reaching these seas, yet by perseverance, and a second effort, they might succeed.

Commodore Don Joseph Pizarro had also been disappointed in getting into these seas this year, though he had attempted it in a single ship called the Asia; but was obliged to put back to Buenos Ayres with the loss of one of his masts, and another was carried away just at the mouth of the Rio de la Plata. These disappointments rendered it the more necessary for the viceroy to provide for the defence of the coast of Chili, as all ships must pass near it in their course to Peru.

CHAP. III.

Voyage to the Island of Juan Fernandes; with an Account of the Seas and Winds in that Passage.

AMONG other precautions taken by the vigilant viceroy of Lima, for the defence of the south-sea, he fitted out, as we have just mentioned, two frigates for cruizing on the coast of Chili; and gave the command of one, called Nuestra Senora de Belen, to Don George Juan, and appointed me for the other, called the Rosa: they had been both merchant ships employed in these seas, all the king's ships being sent in the Panama squadron. They were between six and seven hundred tons: each carried thirty guns on one deck, and three hundred and fifty men, all picked and expert sailors. The ships were also prime sailers: so that our force was in all respects sufficient for the service on which it was employed; and with the assistance of Providence, would doubtless have answered the viceroy's expectations.

On

On the fourth of December 1742, we got under sail, intending to steer first to the island of Juan Fernandes. Our course was from S. W. one quarter westerly, to S. one quarter westerly, according as the winds permitted, which were continually between the E. S. E. and S. S. E. but not always of the same strength; sometimes short calms intervened, and at others sudden squalls, but did us no great damage. This course was continued till the 27th of the same month, when being in the latitude of 30° and a little more than 15° W. of Callao harbour, and the wind at N. W., we altered our course, steering E. S. E. and E. till we made the island without that of Juan Fernandes. This happened on the 7th of January 1743, at three in the evening; the S. point of the island bearing N. E. one quarter easterly, and the N. W. point, N. E. We now continued steering E. one quarter northerly, and the next day at eleven in the morning we had sight of the other island called de Tierra, bearing E. N. E. And in the following night having weathered the north point, we the next day came to an anchor in the bay.

During our passage from Callao to the tropic, we had light winds, often interrupted with short calms; but after we had crossed the tropic, they were more settled, stronger, and squally, but not dangerous; being of short continuance. But as I have already noticed in another part, they always blow from the S. E. and never from the S. W. till you are fifteen or twenty degrees W. of the meridian of Callao. When we concluded ourselves in the proper latitude for standing towards the islands, and found the wind at N. W. we steered E. in order to reach the meridian of Juan Fernandes. The wind then shifted round from W. N. W. to W. S. W. and S. and afterwards returned to its usual rumbs of S. E. S. S. E. and S. E. one quarter easterly. On the 27th of December,

the wind again veered to the N. W. and continued so the whole day; the two succeeding days at N. N. W. and N. W. but on the 30th veered to the W. N. W. On the 31st it shifted to S. S. W. and on the 1st of January veered round to the S. S. S. E. and S. E. Those therefore who endeavour to gain such winds, stand off from the coast till they fall in with them; and this sometimes happens at a greater distance than at others; I mean during the summer; for in winter a different course is necessary, as we shall explain in the sequel.

The atmosphere of these seas is generally filled with thick vapours to a considerable height: so that often for four or five days successively, there is no possibility of observing the latitude. These fogs the sailors call Sures pardos, and are fond of them, as they are a sure sign that the wind will be fresh and constant, and that they shall not be troubled with calms. At this time it is very common to see the horizon filled with a dark cloud, but of no dangerous consequence, except freshening the wind a little more than usual, and a short shower of rain; the weather, in four or five minutes, becoming as fair as before. The same thing presages the turbonada, or short hurricane; for the cloud is no sooner formed on the horizon, than it begins, according to the sailor's phrase, *to open its eye*, i. e. the cloud breaks, and the part of the horizon where it was formed becomes clear. These turbonadas are most common after you are passed the 17th or 18th degree of latitude.

Near the tropic, that is, between the parallels of fourteen or sixteen and twenty-eight degrees, calms greatly prevail during the months of January, February, and even March; and in some years more than in others; but near the coast they are not so common, on account of the land breezes, which are always between the S. E. and E. S. E. Formerly, and

and even till within these few years, the voyage to and from Callao to Chili, was rarely performed in less than a twelvemonth; owing to a fear of standing off to a great distance from the coast: for by tacking along the shore they made but little way; and consequently laid the ships under a necessity of putting into the intermediate harbours for water and provisions; but an European pilot making his first voyage in the usual manner, observed that the course of the currents was from the W. and S. W., whence he concluded that winds from those quarters might be found farther off at sea. Accordingly in his second voyage he stood off to a great distance, in order to fall in with those winds, and had the satisfaction to find that he was not mistaken; so that he reached Chili in little more than thirty days. This being so very far short of the usual term, he was suspected of sorcery, and ever after called Brujo, a sorcerer. From this report, and the evidence of the dates of his papers, persons of all ranks were persuaded that he sailed by magic, and theInquisition caused him to be apprehended; but on examining his journals, they applauded his sagacity, and were convinced that if others did not perform the same voyage with equal dispatch, it was owing to their timidity in not stretching off to a proper distance from the coast as he had done. And thus he had the honour of leading the way in that expeditious course, which has ever since been followed.

In all this passage you have an easy sea, the swell coming sometimes from the S. E. S. or E. being the points from whence the wind blows; at others from the S. W. and W. particularly after you are ten or twelve degrees from the coast. And it is only near the island of Juan Fernandes, that you meet with a hollow sea. The course of the waves is there sufficiently manifest; for on quitting the coast of Callao, to about sixty degrees farther to the S. their

course is to the northwards: but, from between the parallels of sixteen and twenty degrees, their course is imperceptible; while in higher latitudes they run with some force S. and S. W. and with a greater velocity in winter than in summer; as I know from my own experience, having in my second voyage to Chili, in the year 1744, at the end of October, and beginning of November, taken the greatest care, that the distances between the knots on the log line should be 47 Paris feet and a half, for measuring the ship's way; but every day found that the observed latitude exceeded the latitude by account ten or fifteen minutes. The same observation was made by Don George Juan, in both his voyages: as well as by the captain, and officers of the French ship, in which I returned: so that the reality of the course of the sea is proved beyond exception; and in this manner it continues to the 38th or 40th degree of latitude.

In the latitude of 34° 30′ and 4° 10′ W. of Callao, you meet with a track of green water, extending N. and S. and along which you sail above thirty leagues. Probably it runs to a great distance in that sea, being found in every latitude to the coast of Guatemala; but not always under the same meridian, winding away N. W. It is also met with in a higher latitude than that of Juan Fernandes; and it has also been observed by ships in their course to Chiloe, or Baldivia.

In this passage, tho' part of it be at such a great distance from the land, we meet with a kind of birds called Pardelas, which distinguish themselves from all other species, by venturing so far from the land. They are something larger than a pigeon; their bodies long; their necks short; their tails of a proper proportion, and their wings long and slender. There are two sorts of these birds, and of different colours, one parda or brown, from whence they derive their name; the other black, and called pardela gallinera, but in other

other circumstances they are entirely the same. A smaller bird is also seen in these seas, called Alma de Maestre; it is white spotted with black, and has a long tail; but is not so common as the Pardelas: They are most frequent in stormy weather. Within ten leagues of the islands of Juan Fernandes, are seen some balenatos, or small whales; and at near the same distance, sea-wolves; but the latter seldom go far from the shore.

THOUGH this sea has not been improperly dignified with the appellation of Pacific, with regard to the interval between the tropics; yet that particular cannot with any justice be applied to it, if considered in its whole extent: tempestuous weather being equally common in the latitudes of twenty and twenty-three degrees in the south-sea, as in the oceans of Europe; and in higher latitudes storms are more frequent and violent. I am inclined to think that the first Spaniards gave it the name of the Pacific Sea, from their being greatly pleased with its smoothness, and the gentleness of the winds in their first voyages; concluding that it was so in every part; but the fury of the winter storms, and the roughness of the sea, which are equal to those in any other parts, abundantly demonstrate, that they formed a judgement too hastily.

ALONG these coasts and the adjacent sea, the winter begins at the same time as at Lima; that is, in the month of June, lasting till October and November; but its greatest violence is past in August or September. During the whole winter season, there is no dependence on being safe from storms, which rise with a sudden rapidity; and in all latitudes beyond forty degrees, the winter sets in considerably sooner, even at the beginning of April, and is also observed to last longer.

THE winter in all latitudes beyond 20° is ushered in by northerly winds. They are not indeed fixed like those of the S. though common to the season. They

always blow with great violence; but not always with the same degree: being less strong in the beginning than in the depth of winter, when their rage strikes the most resolute with horror, and raises such enormous waves, that the atmosphere is crowded with vapours: and these turn to a drizzling rain, which lasts as long as the storm continues. It often happens that these violent N. winds, without the least sign of an approaching change, shift round instantly to the W. which change is called the travesia, but continue to blow with the same force. Sometimes indeed this sudden change is indicated by the horizon clearing up a little in that quarter: but in seven or eight minutes after the appearance of this small gleam of light, a second storm comes on; so that when a ship is labouring against the violence of a storm from the N. the greatest care must be taken, on the least appearance, to prepare for the travesia; indeed its rapidity is often such as not to allow time sufficient for making the necessary preparations, and the danger is sufficiently evident if the ship has her sails set, or is lying to.

In the month of April 1743, in the latitude of 40°, I had the misfortune of experiencing the fury of a storm at N. which lasted in its full violence from the 29th of March till the 4th of April. Twice the wind shifted to the travesia, and veering round to the southward, returned in a few hours to the N. The first time it shifted to the W. the ship by the vortices formed in the sea by this sudden opposition to the course of its waves, was so covered with water from head to stern, that the officers who were on the watch concluded she had foundered; but fortunately we had our larboard tacks on board, and by a small motion of the helm, the ship followed the change of the wind, and brought to without receiving any damage; whereas we should otherwise in all probability have been lost. Another circumstance in our favour was, that the wind was some points to the westward of the N.

For tho' these winds are here called nortes, they are generally between the N. and N. W. and during their season, veering in some squalls to the N. and in others to the N. W. Sudden calms also often intervene; but if these happen before the wind have passed the travesia, it returns in about half, or at least an hour with redoubled fury. These dangerous variations are however indicated by the thickness of the atmosphere, and the dense clouds in the horizon. The duration of these storms is far from being fixed or regular: tho' I well know some pilots here will have it, that the N. wind blows twenty-four hours, and then passes to the travesia; that it continues there with equal violence three or four hours, accompanied with showers, which abate its first violence; and that it then veers round till it comes to the S. W. when fair weather succeeds. I own indeed that I have in several voyages found this to be true; but at other times I experienced, that the successive changes of the wind are very different. The storm at N. I before mentioned, began March the 29th, at one in the afternoon, and lasted till the 31st at ten at night, which made fifty-seven hours; then the wind shifted to the travesia, where it continued till the 1st of April without any abatement, that is, during the space of twenty-two hours. From the W. the wind veered round to the W. S. W. and S. W. still blowing with its former violence. Hence a short calm succeeded; after which, it a second time shifted to the N. where it continued blowing with its former fury fifteen or twenty hours; then came on a second travesia; and soon after its violence abated, and the next night shifted from S. W. to S. E. Thus the whole continuance of the storm was four natural days and nine hours; and I have since met with others of the same violence and duration, as I shall mention in their proper place. What I would infer from my own experience, confirmed by the information of several pilots, is, that the duration of

these storms is proportional to the latitude; being between 20 and 30 degrees, neither so violent nor lasting as between 30 and 36; and still increasing in proportion as the latitude is greater.

These winds have likewise no regular or settled period, the interval betwixt them being sometimes not above eight days; at others much longer; nor do they always blow with the same violence; but are most uncertain in the winter, rising suddenly when least expected, tho' not always blowing with the same force.

In this sea a change of the wind from N. to N. E. is a sure sign of stormy weather; for the wind is never fixed in the N. E. nor does it ever change from thence to the E. its constant variation being to the W. or S. W. contrary to what is seen in the northern hemisphere. Indeed in both the change of the wind usually corresponds with the course of the sun; and hence it is, that as in one hemisphere it changes from E. to S. and thence to the W. conformable to the course of the luminary, so in the other it changes, for the same reason, from the E. to N. and afterwards to W.

It is an old observation among the pilots of this sea, that a day or two before the N. wind begins to blow, there is always seen along the shores, and about the ships, a sort of sea-fowl, called quebrantahuessas, i. e. ossifrage, or break-bones. These birds seldom appear at other times. I am little inclined to believe, much less to propagate any vulgar report; but here I must declare, that after repeated observations, in order to discover the truth or falsity of this assretion, I always saw them before every storm I met with here; and sometimes even a day before, when there was not the least appearance of the winds coming about to the N. and as the winds increased, great numbers of them gathered about the ship, sometimes flying round her, at others settling on the waves, but always kept near the ship, till fair weather returned. It is still more singular, that they are never seen either on the

sea

sea or land, except in stormy weather; nor is it known where they hide themselves when it is fair, that they should so immediately cover, as it were, the sea, when their natural instinct informs them of the approach of a N. wind.

This bird exceeds the size of a large duck, has a short thick arched neck, with a large head, and a thick, but short bill, a small tail, a rising back, large wings and small legs. They are by their plumage, divided into two different kinds, one being white, spotted with dark brown, and the upper part of its wings entirely of the latter colour: the breast of the other, together with the inside of the wings, the whole head, and the lower part of the neck is white; but the back, the upper parts of the wings and neck of a very dark brown, and are hence called lamo prieto, black-backs. The last kind are, by the pilots, accounted the most certain sign, the others being often seen without any alteration of weather immediately succeeding. I well knew a pilot here, who was a native of Callao, a man of indefatigable curiosity and exactness, never omitting to insert in his journals the most minute circumstances. His name was Bernardo de Mendosa, and with him these fowls were considered as so sure a sign, that when he was in any of these ports, and his ship ready to put to sea, it was his constant custom to take a walk on the shore, to see whether he could perceive any of them in the offing; and if he did, he continued in the harbour till the tempest was over; and he assured me, that his conforming to this observation had been of the greatest advantage to him; relating, in confirmation of his opinion, that being once at Baldivia, the governor, so far from regarding his apprehensions from such presages, turned them into ridicule, and insisted on his putting to sea; but was soon convinced that these omens were not chimeras, for the vessel was hardly out of the harbour, when a storm at N. came on

on with such violence, that it was with the utmost difficulty she was saved from being wrecked in that bay; and this would infallibly at last have been the consequence had the storm continued some time longer; for even when the wind abated, they found it hardly possible to carry her into the harbour to repair the damages she had received.

Other observations relating to these northerly winds are, that they always blow when the Sures are in their strength, in the higher latitudes, and also between the parallel of 20° and that of Panama, it being then winter in those climates; and are also found in latitudes beyond 20° but never nearer to the equinoctial. Another observation is, that during the time of the Brisas, between Panama and the equinoctial, these winds are never felt in any part of the Pacific Sea, the S. winds alone prevailing there. Lastly, it is observed, that within thirty or forty leagues of the coast of Chili, while one part is agitated with storms at N. the S. winds freshen in another. This, however singular it may appear, is no more than what was experienced by the three ships, Esperanza, Belen, and Rosa, which being at the mouth of the Bay of Conception, the latter took her leave of them, and bore away with a fresh gale at S. to Valparaiso, whilst the others who steered for the islands of Juan Fernandes, were overtaken in their passage by a storm at N.

As in summer the S. winds generally shift between the S. S. E. and E. S. E., so in winter, they continue for some time between the S. W. and S.; consequently there is a necessity, in the latter season, to stand out to such a great distance from the coast in quest of them, as must be done in summer.

CHAP.

CHAP. IV.

Account of the Islands of Juan Fernandes: Voyage from those Islands to Santa Maria, and from thence to the Bay of Conception.

THE islands of Juan Fernandes, which, on account of their situation, belong to the kingdom of Chili, are two in number. One, as lying farther to the W. is distinguished by the epithet De Afuera; and the other, as nearer the land, or to the eastward, is called La de Tierra. The former, which is something above a league in length, is nearly of an oval figure, and the land very high, so that it has the appearance of a round mountain; and its steepness on all sides renders it every where almost inaccessible. Several large cascades tumble from its summit, and the water of one of them, after a succession of long falls among the rock on the S. W. side of the island, precipitates itself into the sea with such amazing impetuosity, that its froth may be seen at three leagues distance. The longitude of this island, according to the reckoning of Don George Juan, admitting the currents to set towards the S. W., is 3° 20′ W. from the meridian of Callao; but according to my computation 3° 27′. By the coast we steered from the meridian de Afuera till we reached la de Tierra, we concluded the distance between those islands to be thirty-four leagues.

The island de Tierra, which is about four hundred and forty leagues to the N. of Cape Horn, is between three or four leagues from E. to W. which is its greatest length. It is for the most part high land, but not destitute of some plains, though these are part of the mountains themselves. Its valleys are full of trees, and some of them an excellent timber. Here is likewise the piemento tree, resembling the Chiapa

Chiapa in New Spain. The plains and little hills produce a sort of straw, resembling that of oats, and growing higher than the usual stature of a man. The water, of which several streams fall from the eminences into the sea, is very light, creates an appetite, and, among other medicinal qualities, is excellent against indigestion. Here are many dogs of different species, particularly of the greyhound kind; and also a great number of goats, which it is very difficult to come at, artfully keeping themselves among those crags and precipices, where no other animal but themselves can live. The dogs owe their origin to a colony sent thither, not many years ago, by the president of Chili, and the vice-roy of Peru, in order totally to exterminate the goats; that any pirates or ships of the enemy might not here be furnished with provisions. But this scheme has proved ineffectual, the dogs being incapable of pursuing them among the fastnesses where they live, these animals leaping from one rock to another with surprising agility. Thus far indeed it has answered the purpose; for ships cannot now so easily furnish themselves with provisions here, it being very difficult to kill even a single goat.

Very few birds frequent this island, and though we found several white feathers on the ground, and also parts of carcases, which seemed to have been gnawed by the dogs, we saw but very few flying, and those wholly black. It is not indeed improbable, but these islands may be the winter retreats of some kinds of birds, which on the approach of summer remove to another climate.

In this island are mountains of a great height; and the sides of those towards the N. are covered with trees of good timber; but few or none are seen on those of the S. part, except in the breaches and valleys; owing doubtless to the piercing violence of the S. winds, which destroys them or checks their

growth. On the other hand, every part is covered with tall grass or straw, already mentioned. Among the various sorts of trees with which the island is decorated, there are none of the American fruit-trees; owing to the coldness of the climate, which is increased by the violence of the winds, so that even the heats of summer are moderate.

IN this island are three harbours or bays; but those on the W. and E. sides have only water sufficient for small vessels; so that the only one proper for large ships is that on the N. or rather N. E. side of the island. The latter, which is properly called Juan Fernandes, consists of a bay formed by the coast, but exposed to the N. and N. E. winds; so that in winter no ship can lie safely in it; and even in summer, it is not free from danger, on account of the great depth of water; for within the distance of a cable's length or two from the shore, it has fifty fathom; and growing deeper as the distance increases. To this must also be added the badness of the ground, which being of sand, and a tenacious mud, mixed with shells and gravel, the cables are greatly rubbed by it, and consequently the anchorage rendered unsafe. The ships are also exposed to continual squalls caused by the Sures, which produce a very troublesome sea; violent currents likewise set into the bay and form dangerous eddies. Lastly, the steepness of the coast renders it very difficult to be approached on account of the dashing of the waves against it; and accordingly the only ships that put into this port are such as belong to pirates, or the enemy; this island being the sole refuge for them in the South seas. And they expose themselves to these dangers, merely through the necessity of taking in water and wood, refreshing their crews, and furnishing themselves with fish, which is caught here in great abundance.

THESE foreign ships, which in order to refresh their crews after the fatigues of so long a voyage, and

and the dangers of weathering Cape Horn, make for the harbour of Juan Fernandes, are very careful to secure themselves against the above-mentioned dangers, and therefore sail up to the farthest part of the bay, where they moor with an anchor in the water, and another on the S. W. shore. But even this precaution is not sometimes sufficient to secure them, as appears from the wrecks of three ships; two of which have been long there, but the other of a more recent date.

The island de Afuera is every where prodigious high land, and the shores so steep and craggy as to afford no convenient landing-place; which, together with its having no harbour, prevents all ships, whether those of the enemy, or the country, from touching at it.

The sea, all around the island de Tierra, may be said to be filled with sea-wolves, of which there are observed to be three principal species; the first are small, not being above a yard in length, and their hair a dark brown: those of the second are about a toise and a half in length, and of a greyish brown colour: and those of the third are in general two toises in length, and the hair of a pale ash-colour. The head of these creatures is too small in proportion to the rest of their body, and terminates in a snout; which bearing a great resemblance to that of a wolf, they have acquired the name. The mouth is proportioned to the head; but the tongue is very thick, and almost round. They have a row of large pointed teeth in each jaw, two thirds of which are in alveoli or sockets; but the others, being the most hard and solid, are without them. This threatening appearance is heightened by whiskers like those of cats, or rather tygers. Their eyes are small; and their ears, from the root to the extremity, not above six or eight lines in length, and of a proportional breadth. Their nostrils

nostrils are also very small; and the only parts destitute of hair, these having a glandulous membrane, like the same part in dogs. This creature has two fins, which serve them both for swimming in the water, and for walking on the ground. The tail, which is every where equally cartilaginous, is of a length proportional to the body, but much thicker than those of the generality of fish. They carry it horizontally; so that by inverting the last vertebræ, where the articulations are more flexible than in other parts, they form of it a kind of hind feet; and at the same time the fins helping them before, they walk without trailing the body along the ground. A remarkable particular in the formation of this amphibious creature is, that in both the fins and the extremity of the tail there are protuberances resembling fingers, they are small bones or cartilages inclosed within those callous membranes, which cover the fins and tail. These fingers they can expand so as to cover the whole breadth of the fin; and thus form, as it were, the sole to tread upon. At the end of each is a nail of about two lines in length, and half a line in breadth.

AMONG the several articulations in the fins are two very remarkable, one at the junction of the Omoplata, where it forms a kind of shoulder, and the other at the extremity of the fin, where the fingers are connected. The same œconomy is observed in the tail; and thus they are adapted to an amphibious life: accordingly, though not with a celerity equal to that of quadrupeds, they climb up steep rocks of a height one would think them impracticable to such creatures, as they are absolutely so to men; and come down again with the same ease, notwithstanding their great bulk and fatness, which is such in the larger species, that their diameter at the fins is little short of a yard and a half.

THEIR organs of generation are placed at the lower extremity

extremity of the belly, and at the time of coition the male and female place themselves on their tails, with their faces inward, embracing each other with their fins, which, on this occasion, supply the place of arms. The female brings forth and suckles her young in the same manner as terrestrial creatures; but has never above one or two at a time.

The largest species are by some called sea lions, but in these seas their general name is Lobos de Aceyte, or oil wolves: because when they move, they appear like a skin full of oil, from the motion of the vast quantity of fat, or blubber, of which their enormous body consists. And though oil is made from all the species, none yield it in proportion to these; indeed they consist of little else. I was once entertained with a particular circumstance relating to this species. A sailor having wounded one, it immediately plunged itself into the sea; but had hardly tinged the water with its blood, when it was surrounded in an instant by shoals of the other two species, who attacked and devoured it in a few minutes, which was not the case with the other species; which, when wounded, though they also plunged into the water, yet the sight of their blood had no effect on others; nor were they ever attacked. They are mischievous, and their bite the more dangerous, as they never let go their hold; but they are heavy, torpid, and sluggish, nor can they turn their heads without great difficulty. They were so far from avoiding our men, that they were obliged to strike them with sticks to make them move out of their way. The cry of their young very nearly resembles the bleating of a sheep; but when they all join, as it were in concert, the noise is insupportable. They are the chief food of the dogs, who, after killing them, take off their skin with great dexterity. In their attack, they aim always at the throat; and when they have destroyed the creature, they tear the skin all round

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the neck; then seizing it by the head, and putting their fore-feet between the skin and the flesh, they strip it entirely off, and then devour the carcase.

THE largest kind, as we have already observed, are, by the sailors, called sea-lions, the hair of the neck distinguishing them from the others, and has some resemblance to a mane, though not much longer than that on the other parts of the animal; but as their whole body has a greater similarity to that of the wolf, and being entirely like the other species, the name of sea-wolf seems to be more proper than that given them by the seamen.

ALL these kinds of sea-wolves have so tender a sensation at the extremity of their nostrils, that though they will bear many wounds in other parts of the body, the slightest stroke on this dispatches them; and that they are sensible of it, is evident from their making it their chief care to defend that part from any violence.

A GREAT singularity is also observable in the dogs of this island, namely, that they never bark. We caught some of them, and brought them on board; but they never made any noise till joined with some tame dogs, and then indeed they began to imitate them, but in a strange manner, as if learning a thing not natural to them.

THE islands of Juan Fernandes abound greatly in fish; among which are two species, not observed in any other part of this vast sea. One is the cod, which, though not absolutely like that of Newfoundland, the difference is very minute, either with regard to colour, form, taste, and even the small scales observable on that fish. They are of different sizes, but the largest three or four feet in length.

The other species is a fish resembling the tollo in shape, but much more palateable. From the fore part of each of the two fins on its back, grows a kind of triangular spur, a little bent, but round near the back, and terminating in a point. It has a fine gloss, and the hardness of a bone. At the root of it

is a soft spongy substance. This spur, or bone, for it resembles both, is such a present remedy for the tooth-ache, that, the point of it being applied to the part affected, it entirely removes the pain in half an hour. The first account I had of this singular virtue was from a Frenchman, who was my pilot; but as reason would not permit me to give credit, without experience, to a circumstance seemingly so void of probability, the asseverations of the man increased my desire of putting it to the proof, which I did several times, and always with success. I did not fail to communicate a discovery of such great benefit; and accordingly several of my acquaintance, who laboured under that excruciating pain, made trial of it, and found from it the same happy effects; with this particular circumstance, that soon after the application of the bone to the part affected, it became insensible of pain, a drowsiness succeeded, and they awaked free from the torture. I observed that the spongy substance at the root, during the operation, became gradually inflated, and softer than in its natural state, which could not be effected solely by the moisture of the mouth, the part put into it being compact, hard, and smooth as ivory. I am therefore inclined to think that it has an attractive virtue, which extracts the morbific humour, and collects it in the root. The common length of these anodyne spurs, or bones, is two inches and a half, of which one moiety, together with the root, is within the body of the fish. Each face of the triangle is about four lines in breadth. They are taken in the same plenty as the others.

The abundance of fish about these islands is such, that two hours fishing in the morning, and as many in the evening, with only six or eight nets, procured no only a sufficiency for all the ship's company, but a considerable quantity remained for salting. The chief kinds are cod, berrugates, the spur fish, sole, turbot, jureles, and lobsters; besides an infinite number

number of small fish, which covered the water; a circumstance the more surprizing, as there are such multitudes of sea-wolves all along the coast, which live on nothing else. For though there is very little fishing near these islands, yet doubtless the constant ravages of such enormous creatures, may be thought at least equal to the capture of a large fishery.

THESE several species are all so delicate and palateable, that the epicure would be at a loss which to prefer. The lobsters are often half a yard in length, and are taken even with greater ease than the others. They are of an exquisite taste, though the meat is something hard. The berrugate is a large scaly fish.

WE continued at anchor near this island till the 22d of January; during which time, we reconnoitred every part of it, and particularly, visited the place where the English had erected their tents, in order to discover any private signal they might have left for the information of any other ships that should afterwards touch at this island. The president of Chili had, with the same view, sent a ship hither some months before our arrival; but all they met with was two bottles, in each of which was a writing in cypher; and all we discovered were the piquets and poles of the tents; with their small wooden bridges for crossing the breaches, and other things of that kind. Both our frigates having taken in water and wood, we sailed at three in the afternoon for the island of Santa Maria, which we made on the 5th of February, and after carefully surveying it on all sides, continued our course till half an hour after seven of the same day, when we came to an anchor at Puerto Tome, on the E. side of the bay of Conception.

AT our departure from the island of Fernandes, we steered first E. one quarter southerly, and the winds continuing between the S. and S. E. we tacked on the 23d, and steered between the W. S. W. and S. S. W but on the 82th, being in the latitude of 35° 33′ 30″

33′ 30″ S. lat. and a degree W. of the meridian de Afuera de Juan Fernandes, we observed the winds to shift from S. to S. W. Accordingly we altered our course, steered E. and E. S. E. till the 31st day, when we found ourselves in the latitude of 36° 23′ and about fifteen or twenty leagues N. W. of the bay of Conception. But the weather, which had been the same also the day preceding, was so hazy, that we could not see the other frigate. Sometimes indeed we discerned the colours, but without having any sight either of the hull or mast.* This was however sufficient to assure us that they were within half a cannon shot of each other. This, and our being something to leeward of the bay, obliged us to stand to some distance off to sea; and thus we kept along the coast without venturing to approach it till the 5th, when at half an hour after nine in the morning, the weather cleared up, and gave us sight of Cape Carnero, bearing S. S. E. ten or twelve leagues: and the middle part of Santa Maria, N. E. one quarter northerly. We crowded sail towards the latter, and at eleven the frigates lay to, Cape Rumena bearing S. one quarter easterly distance four leagues, and Cape Lavapies E. one quarter N. E. distance two leagues. The S. point of the island of Santa Maria bore N. E. four leagues distant, the N. point of the same island N. N. E. and a large rock without, N. one quarter easterly. Here we sent our long boat with orders to go betwixt the islands and the continent, and take a survey of it, and then join us in Conception bay. Accordingly the frigates got under sail at twelve at noon, with a fresh gale at S. S. E. and soon after came to an anchor in the said bay.

Don George Juan, from his reckoning, concluded that the Island of Santa Maria, which lies in 37°3′ S. latitude, was 7°10′ E. of the island de Afuera de Juan Fernandes. Whereas I differed 14′ from him, making it only 6° 56′. To

* This I suppose is a mistake, and ought to be read thus: sometimes we saw the looming of the sails, but could not perceive the hull. A.

To the N. W. of this island, at the distance of a league and a half, is a lofty steep rock, with several smaller at its foot; and one league and a half farther to seaward, also on the N. W. side of the island, is a shoal, which, though we at this time saw no breakers on it, we took care to keep at a proper distance. And in my second voyage, in the year 1744, I had a clear view of it, for I not only saw the breakers, it being then low water and the sea running high, but also a reef of rocks at the water's edge. The country pilots have assured me, that by steering in the middle between this shallow and the rock, there is a very safe channel, having in most parts fifty or sixty fathom water.

IN my second voyage above-mentioned, on board a French frigate called La Delivrance, in the latitude of 36° 54′ and 2° 24′ W. of the island of Santa Maria, about half an hour after making our observations, we unexpectedly found ourselves in a tract of thick water of a yellowish colour; which naturally occasioning a great surprise, we started from the table, being then at dinner, and hastened up to the quarter deck. It was now too late to put the ship about; she being in the very centre of it. This shoal, as it appeared to us, stretched near two leagues from N. to S. and was about six or eight hundred toises over from E. to W. The colour of the water was of so deep a yellow, that, after Providence had happily carried us through it, we could easily distinguish it at a considerable distance. I must own, our consternation was such, from our concluding we were on a shoal, as there was all the appearance of it, that we had no thoughts of bringing the frigate to, till we had got our sounding line in order. In some parts the water was of a deeper yellow, as being more shallow. In others we could perceive rays of sea or green water, intermixed with that of the shoal. No chart has taken any notice of it; nor was it indeed before known

to any of the pilots of these seas, as they themselves acknowledged, notwithstanding their repeated voyages. We should therefore have been guilty of a great indifference with regard to the public safety, had we neglected to have given this account of it.

The general winds, between the islands of Juan Fernandes and this place, are the same as those which reign in the gulph; and which have been already described; but the currents are different, setting N. W.; and this becomes the more perceivable in proportion as you approach nearer to the coast. From the island de Tierra de Juan Fernandes eastward, the water is greenish, and westward blueish. This I have myself observed several times, even when not in sight of the island; and also that the colour of the water changes with the meridian. Between the islands and the continent, I have frequently seen the water spouted up by the whales; an appearance which has been often taken for breakers.

Within twenty or thirty leagues of the coast, we met with large flights of curlews; but this distance is the utmost limit of their excursions. These birds are of a middling bigness, mostly white except the breast and upper part of the wings, which are of a rose colour. Their heads are proportionate to their bodies, but their bill very long, slender, and crooked; and as small at the root as at the point. They fly in vast troops, and consequently are easily known.

The coasts in general of this sea from Guayaquil to the southward are very difficult to be seen, except in summer time, being the whole winter covered with such thick fogs, that no object can be discerned at half a league distance. And this dangerous haziness extends often to the distance of fifteen or twenty leagues off to sea. But during the night, and till about ten or eleven in the morning, the fog is only on the land. At that time it moves farther to seaward, with a prodigious density, resembling a wall, totally concealing

every object on the other side of it: and the cautious mariner forbears to make his way through it, being uncertain whether he shall meet with clearer weather, as he approaches nearer to the coast.

THESE winter fogs on the coast of Chili, seem to be occasioned by the north winds; they being observed always to thicken when those winds blow, and though the atmosphere be clear when the wind shifts to that quarter, it is instantaneously filled with those vapours; which continue without any diminution, till the S. winds set in, and have blown fresh for two or three days successively. But as in winter they are usually interrupted by the winds at N. W. and S. W. these vapours, so inconvenient to commerce, are seldom totally dispersed; and it is a common phrase among the mariners of these parts, that the N. is a filthy wind on account of the disagreeable vapours, with which it is loaded, and the S. is a cleanly wind, sweeping these nuisances from the coast and country, and purifying the air. I call these winter fogs, as they are equally common all along the coast from the parallel of twenty to the equinox, where no N. winds are known. And as I have already related of * Lima, all the inhabitants of the coast live, during the winter, in a perpetual fog.

I shall conclude this chapter, with a table of the variations of the needle observed in my second voyage, in the frigate La Delivrance, from Callao, to Conception Bay.

South Lat.		Long. from Callao.		Variations and their kinds.		
Deg.	min.	Deg.	min.	Deg.	min.	
22	13½	351	03	7	58	E.
25	37½	349	51	9	22	
28	27	348	46	9	42	
32	10	350	45½	9	58	

* Book I. Chap. VI.

Deg.	min.	Deg.	min.	Deg.	min.
32	52½	351	14½	9	06
33	51½	352	32	10	00
35	06	354	39½	11	10
36	57	000	47½	11	15

Don George Juan, who sailed from Callao, with the Delivrance, as commander of the Lys, another French frigate, made the following observations.

South Latitude.		Long. from Callao.		Variations and their kinds.		
Deg.	min.	Deg.	min.	Deg.	min.	E.
12	06	000	00	8	52	
12	50	359	00	7	48	
23	00	350	00	6	00	
25	30	349	15	5	00	
27	00	348	30	5	15	
30	45	349	00	6	00	
33	30	352	20	7	10	
		Without the island of Juan Fernandes.				
33	50	356	00	8	30	
33	40	000	00	10	30	
33	45	002	00	10	45	
		On the coast of Valparaiso.				
33	20	005	00	12	30	

The sensible difference between these variations arose from the difference of the needles, by which they were observed; and the reasons for that difference have been considered in another place.

The difference of the meridians between Callao and Conception, appears from the series of observations made by us at Lima, and those by father Fevillee, at the same place, to be 3° 58′ which is the eastern distance of conception from Callao, yet in the maps of this country it is placed eight or nine degrees to the eastward, a mistake proceeding from a want of attention

tion in the pilots in observing the direction of the currents; and as these carry the ship towards the S. W. the pilots, when in the offing, begin to compute their distance from the coast. But this being in reality much greater than that given by the rhumb, they are afterwards under a necessity of steering towards the E. and thence their reckoning makes the port farther to the eastward than it really is; and the currents running sometimes with a greater velocity than at others, pilots often differ in placing the meridian of Conception, so that very few at first make the cape, though assisted by that chart, which they consider as the best. For all these draughts are laid down from the false conclusions of erroneous journals, no allowance having been made for the setting of the currents. The difference of latitude proves beyond contradiction the reality of the currents, and the degree of their velocity, as I have already noticed.

ON the 26th of January, the Esperanza, a Spanish frigate, commanded by Don Pedro de Mendinueta, came to an anchor in the harbour of Talcaguano, after her voyage from Monte-video in the river of Buenos Ayres, round Cape Horn, which she had performed in sixty-six days. On our arrival at Puerto Tome, an officer came on board the Belin, the very same night we came to an anchor; and the day following, being the sixth of February, our two frigates joined the Esperanza, at Talcaguano, and formed a little squadron under the command of Don Pedro de Mendinueta, according to orders from the Viceroy, who had received an account that the Esperanza lay ready at Monte-video, to proceed on her voyage that summer into the south-sea, and that commodore Don Joseph Pizarro, with other officers, were travelling over land to Santiago de Chili; which he had reached at the time of our arrival.

CHAP.

CHAP. V.

Description of the City of Conception, in the Kingdom of Chili; with an account of its Commerce, and the Fertility of the Country.

CONCEPTION, otherwise called Penco, was first founded by captain Pedro de Valdivia, in the year 1550. But the powerful revolts of the Indians of Arauco and Tucapel, obliged its inhabitants to remove to Santiago. They cannot, however, be charged with having quitted their settlement till they had been defeated several times by the Indians, in one of which they lost the abovementioned Pedro de Valdivia, who as governor of that kingdom, was commander-in-chief of the forces employed in the conquest of it. The same unhappy fate also attended Francisco de Villagra, who as Valdivia's lieutenant-general had succeeded in the command. These misfortunes, and the superiority of the allied Indians, obliged the Spaniards to abandon Conception. The inhabitants however being desirous of possessing again their plantations in the neighbourhood of that city, and of which they used to make such large profits, petitioned the audience of Lima for leave to return to their original city; but had soon sufficient cause to repent of not having exerted their industry in improving the place whither they had retired; the Indians, on the first notice that the Spaniards were returned to the city, forming a powerful alliance under a daring leader, called Lautaro, took by storm a small fort, which was the whole defence of the city, and put all to the sword, except a small number who had fortunately escaped to Santiago. Some time after Don Gracia de Mendoza, son to the Viceroy de Mendoza, Marquis of Canete, arriving as governor of Chili, with a body of forces sufficient for making head against the Indians, restored the inhabitants of Con-

Conception to their former possessions, with the greatest apparent security. But the year 1603 gave birth to a new and more general confederacy, by which means Conception, La Imperia, and Baldivia, with six smaller places, were destroyed; being the greatest part of the places in this kingdom. Conception, however, received fresh succours, the city was again repaired, and has continued ever since.

Its latitude, according to an observation we made in the year 1744, at Talcaguana, which lies exactly E. and W. with the city, is 36° 43′ 15″ S. and its longitude from the meridian of Teneriff, according to Father Fevillee, 303° 18′ 30″. The city is built on the S. W. shore of a beautiful bay, on an uneven sandy ground, and on a small declivity, having a little river running through it. The city, in its extent, is scarce equal to one of the fourth class. The destruction it suffered in the dreadul earthquake of 1730, occasioned all the houses to be built low, though it had before been subject to these sudden convulsions of nature. This was, however, the last of those remarkable for their melancholy consequences, which extended to Santiago, the capital of the kingdom, which was involved in the same ruin. On the 8th of July, at one in the morning, the first emotions were felt, and the concussions increasing, the sea retreated to a considerable distance; but in a small time returned so impetuously, and with such a swell, that it overflowed the whole city, and the neighbouring countries. In this sudden calamity the inhabitants had no other asylum than the neighbouring eminences. This inundation was soon succeeded by three or four shocks; and at about four in the morning, a little before day-break, the concussions returned with the most tremendous violence, demolishing the few buildings which had withstood the first shocks, and the rapid motion of the sea.

The houses are all either of topias, or mud walls, or adoves, unburnt bricks; but covered with tiles. The

The churches are small and mean; the same may be said of the Franciscan, Augustine, and Dominican convents, as well as those belonging to the fathers of Mercy: but the college of Jesuits is not wholly destitute of elegance, being well built and of a tolerable architecture.

The political government of this city consists of a corregidor, nominated by the king, and who is at the head of the ordinary alcaldes and the regidores. During the vacancy of this post, the duty is performed by the president of Chili, who is governor, and captain-general of the whole kingdom, and president of the audience of Santiago, on which, as its capital, Conception is dependent. The court of audience was originally established in the latter, and continued there from the year 1567, to 1574; but the danger and disturbances, occasioned by the frequent revolts of the Indians, caused it for a while to be suppressed, and afterwards to be removed to the city of Santiago. The president is, however, obliged to reside six months of the year at Conception, that he may attend carefully to the military concerns of the frontiers, see that the forts be in a good condition, and well provided with every thing, in order to keep the Indians of Arauco in awe, and that the military forces are in good order, and well disciplined, and always in readiness to repel any attempts of the Indians, provided they should ever abandon their dread of the Spanish troops. During the other six months, when the governor resides at Santiago, he acts in a very different character; hearing complaints, redressing grievances, and administering justice, that this tribunal may receive the greater dignity from his presence. Here is also a chamber of finances, at the head of which, is an accountant and treasurer. Besides, which Conception has likewise all the other courts and offices usual in the cities of South America.

As all the inhabitants of the towns, villages, and country, within the jurisdiction of Conception, form different bodies of militia, some of which are in pay, and all must be ready on any sudden alarm, there is, besides the corregidor, a Maestra de Campo, who commands in all the military affairs without the city; but we shall have occasion to give a farther account of his duty in the sequel.

THIS city at first belonged to the diocess of Imperial; but that being ruined by the perpetual incursions of the Indians, the episcopal see was removed to Conception, and the chapter changed. It is now a suffragan of Lima, and has a chapter consisting of a bishop, dean, archdeacon, and two prebendaries.

THE jurisdiction of Conception extends from the river Maule on the coast N. of the city to Cape Lavapies. It has few villages; but the whole country full of seats, farms, and cottages.

THE inhabitants consist of Spaniards and Mestizos, who in colour are hardly distinguishable from the former; both being very fair, and some have even fresh complexions. The goodness of the climate, together with the fertility of the country, have drawn hither many Spanish families, both Creoles and Europeans, who live together in that harmony and friendship, which should be an example to the other parts of these provinces; where the comforts of society are greatly lessened by the feuds arising from a mean pride and jealousy. The men in general are well-shaped and robust, and the women handsome. Their customs and dress, are a kind of compound of those of Lima and Quito, but more nearly resemble the latter, except that the men use, instead of a cloak, a poncho, which is made in the form of a quilt, about two yards and a half or three in length, and two in breadth, having an opening in the middle just sufficient to put their head through, the rest hanging down on all sides

sides. (Plate VII.) This is their dress in all weathers, whether walking or riding. The peasants, whom they call Guasos, never pull it off but when they go to rest, tucking it up in such a manner, that both their arms and whole body are at full liberty either for labour or diversion. This is an universal garb among all ranks when they ride on horseback, an exercise very common here; and the women are particularly famous for their skill in horsemanship.

This dress, though so plain and uniform in itself, serves to distinguish the rank and quality of the wearer; as its price is proportional to the work on it. Some wear it as a covering, some for decency, and others for shew. Accordingly if those of the common people cost only four or five dollars, others have stood the owners in an hundred and fifty, or two hundred. This difference arises from the fineness of the stuff, or from the laces and embroidery, with which they are decorated. They are of a double woollen stuff, manufactured by the Indians, and generally of a blue colour, embroidered with red or white, sometimes indeed, the ground is white, embroidered with blue, red, and other colours.

The peasants are surprizingly dextrous in managing the noose and lance; and it is very seldom, that, though on full speed, they miss their aim with the former. Accordingly these are their chief arms, and they will halter a wild bull with the same agility as any other creature; nor could a man, however cautious, avoid being taken in their noose. I shall relate an instance of their address, with regard to an Englishman whom we knew at Lima. He was in the long-boat of a privateer, then lying in Conception bay, intending to land at Talcaguano, with a view of plundering the neighbouring villages; but a body of the country militia made to the shore in order to oppose them. Upon this, the English fired upon them with their musquetry, imagining that

that would be sufficient to put them to flight, and thus the place be open for them to land. They had no sooner discharged their pieces, than one of the peasants, though the boat was at a considerable distance, threw his noose, and notwithstanding all in the boat threw themselves on their faces, he noosed the above-mentioned person, pulling him out of the boat with the greatest rapidity; whilst the others, instead of endeavouring to save him, in their fright thought of nothing but how to get out of danger as soon as possible. It was the Englishman's good fortune not to be strangled or killed by the bruises he received, the slip-knot having passed from one shoulder under the opposite arm, so that he recovered in a few days.

As it is very seldom that they miss, and are obliged, on haltering a creature, to draw the knot, at the same time that they throw the noose, they clap spurs to their horse, and put him on his full speed; that the creature is so far from having time to disengage itself, that it is no sooner caught than disabled. This is also one of the weapons, if I may give it that name, used in their private quarrels, defending themselves with a lance of a middling length. And their address, on these occasions, is so very remarkable, that very often, after a long dispute, in which both parties are heartily tired, they part, with no other hurt than a few bruises. This is also the method they take to satisfy their revenge, endeavouring to halter the object of their hatred, either as he runs from them, or is not apprized of their intention. In this case the only resource in an open country on seeing him with his noose in his hand, is, to throw oneself on the ground, keeping the legs and arms as close to the surface as possible, that the rope may have no room to get under any part. The person may also save himself by standing close to a tree, and, if in the street, by placing himself against the wall. A small distance, that is,

is, under ten or fifteen paces, partly renders their dexterity ineffectual; but there is very great danger of being entangled when the distance is thirty or forty. The nooses, or halters, are thongs of a cow's hide, cut round the skin, and of a proper breadth. These thongs they twist, and work with fat, till they are of a proper degree of suppleness; but so strong, that though when twisted they are not larger than the little finger, yet they hold the wildest bull, when its efforts to escape would break a rope of hemp of much larger dimensions.

The climate of this city is not essentially different from that of the greatest part of Europe. Winter is indeed something colder than in the southern provinces of Spain, but milder than those of the northern; and the summer heats proportionably. In winter the inhabitants seem to be little incommoded by the N. winds, and in summer the heats are moderated by the cooling breezes from the S. The heat is however greater in the city than in the adjacent country, occasioned chiefly by the different disposition of the ground, being intersected by various rivers, some of which are very large, as the Arauco and the Biobio. The latter of which, at a league above its mouth, is very near four leagues in breadth. It may, however, in summer be forded, but not without danger; in the winter it is passed in balzas. At the southern banks of the river, the territories of the wild Indians begin, and near the same shore towards that part are the chain of frontier forts, of which a farther account will be given in the sequel. The country of this jurisdiction consists principally of extensive plains, the Cordillera being at a considerable distance to the eastward, and the whole space between it and the sea coast, one entire and uniform plain, interrupted only by a few eminences, which are an ornament to the country, and render the perspective of it the more agreeable.

The

Fig. 1.

Plan *of* Cape
St. Francois.

See Explan. of the Plates.

Fig. 2. Men of Chili. *Page 235.*

Fig. 3. Manner of Killing the Beasts in Chili.

Neele sculp. Strand.

THE great affinity between this climate and that of Spain is evident from its products, though there is a remarkable difference with regard to their goodneſs and plenty, in both which this country has greatly the advantage. The trees and plants of all kinds have their regular ſeaſons, embelliſhing the fields with their verdure, entertaining the ſight with their various flowers and bloſſoms, and gratifying the palate with their delicious fruits. It is needleſs to mention that the times of the ſeaſon muſt be oppoſite, conſequently the winter in Spain is their ſummer, and the autumn of the former, the ſpring of the latter. In ſaying that this country produces the ſame corn and fruits as Spain, I do not mean thoſe of the moſt ſouthern parts; for neither ſugar-canes, oranges, nor lemons thrive here. Nor is it well adapted to olive-yards, though ſome olives are produced here. But the fruits cultivated in the center of Spain, are the ſame with thoſe produced here in a moſt aſtoniſhing plenty, wheat and other grain, generally producing an hundred fold. I ſhall here relate an inſtance I myſelf ſaw and examined at Talcaguano, in a garden near the ſea ſide, at a place called the Morro, very little more than a quarter of a league from the harbour. Among ſeveral ſtalks of wheat that had grown there without culture, I ſaw one whoſe ſtem was not more than a foot from the ground, but from its knots there afterwards ſprung ſo many ſtalks, as produced thirty-four ears*, the largeſt of which were near three inches in length, and the leaſt not leſs than two. The maſter of the houſe obſerving that I viewed this production of nature with aſtoniſhment, told me that it was nothing extraordinary, for though the grain in the ground commonly ſown, did not often attain ſuch a luxuriancy, it was com-

* This ſpecies of wheat is called *Triticum ſpica multiplici*, and is cultivated in Italy and Sicily.

mon for each ſtalk to produce five or ſix ears. This information raiſed my curioſity; and I met with ſo many inſtances afterwards, that my ſurprize at ſeeing the ſtalk juſt mentioned was greatly abated; as from the moiſture, advantageous expoſure, and richneſs of the ſoil, a much greater produce might naturally be expected than in the ground conſtantly ſown.

The great plenty of wheat here is ſufficiently indicated by its price; a meaſure weighing ſix arobas and ſix pounds, being uſually ſold for eight or ten rials. Yet for want of a market, though at ſo low a price, no more is ſown than is neceſſary for home conſumption; and thence a great part of the country lies fallow.

Here are vines of ſeveral kinds, and which vie with the wheat in exuberance. They are alſo, both with regard to the richneſs and flavour of their grapes, eſteemed beyond any produced in Peru. Moſt of them are red. A ſort of Muſcadel is alſo made here, whoſe flavour far exceeds any of the kind made in Spain. The grapes grow moſtly in eſpaliers, and not on detached vines. In this reſpect alſo, as in the wheat, large tracts of ground are totally neglected. For though its produce is ſo conſiderable, the buyers are ſo few, that the vineyards do not anſwer even the expence of cultivation.

The chief uſe made of theſe rich lands by the owners is, the fattening of oxen, goats and ſheep. And this is the principal employment of greateſt part of the inhabitants of the country of all ranks, and univerſally of the lower claſs. As ſoon as the horned cattle are fattened in theſe luxuriant paſtures, and the proper ſeaſon arrived, four or five hundred, and even more, according to the largeneſs of the farm, are ſlaughtered. They take out the fat, melt it into a kind of lard, there called Graſſa; and buccaneer or dry the fleſh in ſmoke; but the greateſt profit

profit ariſes from the hide, the tallow, and the graſſa, a ſufficient proof of their prodigious fatneſs when killed. But an idea of the fertility of this country may be beſt formed from the value of a live beaſt, which, when fit to be killed, may be purchaſed for four dollars; a price vaſtly beneath that in any other part of India; and may be ſufficient to remove the unjuſt reproach of the poverty of this province. For were the induſtry of the people equal to the fertility of the ſoil, this kingdom would be the moſt opulent of any in America.

THE manner of ſlaughtering the beaſts render it a favourable diverſion to the perſons employed in performing it, and it muſt be owned that their dexterity is really ſurprizing. The cattle intended to be killed are drove into an incloſure. At the gate are the Guaſos on horſeback with their ſpears two or three toiſes in length, and at one end a very ſharp piece of ſteel in the form of a half moon, the points of which are about a foot diſtant from each other. Every thing being ready, the gate of the incloſure is opened, and a beaſt turned out, which naturally betakes itſelf to flight, but is immediately purſued by a Guaſo, who without checking his horſe hamſtrings it in one leg, and then immediately in the other. He then alights, and having diſpatched his capture, ſkins it, takes out the tallow, the fat for the Graſſa, and cuts up the fleſh for ſalting and drying. This done he wraps up the tallow in the hide, and loading it on his horſe, carries it to the farm; returning again for the fleſh. After this he ſets out on another expedition. Sometimes they turn out at once as many beaſts as there are Guaſos ready to kill them. And this is the daily exerciſe till all the cattle appointed for that year's ſlaughter are diſpatched. An European is ſurprized not only at their dexterity in hamſtringing the beaſt, when both are on full ſpeed, but alſo to ſee one man

alone go through the whole work in ſuch a regular method and great diſpatch. If the beaſt be ſwifter than his horſe, the Guaſo has recourſe to his nooſe, and halters him by throwing it either about his neck, or round one or two of his legs, according as opportunity offers, and by that means ſecures him. Then if a tree be near at hand, he gives the end of the thong two or three turns round the trunk, and the whole difficulty of killing the beaſt is over.

The tallow is wrapt up in the hides, and in this manner carried to the city for ſale; the Graſſa is melted into bags of ſheep ſkins; the fleſh, after being cut into thin ſlices, is ſalted, and this is what they call Taſſagear; afterwards it is buccaneered or dried in the ſmoke,* and ſold. The hides they tan, and make from them a moſt excellent leather, eſpecially for the ſoles of ſhoes.† Goats alſo as we have already obſerved, are fattened and turn to good account. Their tallow nearly reſembles that of the ox, and the Cordovan leather made of their ſkins ſurpaſſes every thing of that kind made in any part of the whole kingdom of Peru.

All other proviſions and grain are in the ſame plenty, turkeys, geeſe, and all kinds of poultry are ſold at a remarkable low price, great numbers of them being bred all over the country, with little care and no expence. Wild fowls alſo are very common, among which are canelones, and others deſcribed among the birds found in the deſarts of Quito, though theſe are not ſo large, and more like the bandarrias as they are there called. Here are alſo wood pigeons, turtle doves, partridges, ſnipes, woodcocks, and royal cira-

* They dry it in the ſun, by which it attains a ruſty colour, and appears as though it had been dried in ſmoke. A.

† They tan thin leather with the bark of the mangrove tree. A.

picos,

picos, &c. And with regard to theſe, the air may be ſaid to vie with the fertility of the earth.

AMONG the birds I muſt not omit one of a very ſingular kind, and found all over the country. The natives call theſe birds diſpertadores, awakeners, from their giving notice to others of the approach of any danger. On hearing the noiſe of the approach of any creature whether man or beaſt, or ſeeing them within a ſmall diſtance, they riſe from the ground, and make a loud chattering not unlike that of a magpye; continuing the noiſe, and flying about in the air over the object which cauſed the alarm. This is underſtood by the birds thereabouts, who immediately riſe, and by that means eſcape the danger.

THIS bird is about the ſize of a middling fowl, its plumage black and white, has a thick neck, the head ſomething large, erect, and beautifully adorned with a tuft of feathers; its eyes are large, ſharp and lively; its bill well proportioned, ſtrong, and a little curved. On the fore part of their wings are two ſpurs, about an inch in length, of a reddiſh tinct towards the root, and their points reſembling thoſe of a cock, being very hard and ſharp. Theſe are the weapons they make uſe of againſt the other birds, particularly thoſe of prey, as hawks, and others of that kind, which probably abound the more in this country, from the great variety of prey it affords them.

AMONG the ſinging birds is the goldfinch, in every particular reſembling thoſe of Spain, except a ſmall variation in its plumage. There are beſides others proper to this country, and met with in all the cold climates, particularly the piches, which are ſomething larger than ſparrows. They are of a brown colour, ſpotted with black, except their breaſt, which is of a moſt beautiful red, and ſome feathers of the ſame colour in their wings, intermixed with others of a bright yellow. Amidſt all the fertility of this country, the only inſects are the niguas or piques: and though ſome

ſnakes are found in the fields and woods, their bite is not dangerous. Neither are the country peaſants under any apprehenſions from ravenous beaſts; ſo that nature may be ſaid to pour her treaſures on this country, without blending them with the uſual inconveniences.

The fruits which moſtly abound in Chili, are of the ſame kind as thoſe known in Europe; its cherries in particular are large, and of a fine taſte. The ſtrawberries are of two kinds, one called frutillas, and are larger than thoſe of Quito, wanting little of being equal to a hen's egg in magnitude. The other, which in ſize, colour and taſte, perfectly reſemble thoſe of Spain, grow wild, on the ſide of the eminences with which the plains are interſperſed. And here alſo grow all kind of flowers, without any other culture, than that of benign nature.

Among the remarkable herbs, of which many are medicinal, and others applied to divers uſes, is the panque, of great ſervice in tanning leather. It abounds every where, and grows to about four or five feet from the ground. The principal ſtem, which is of a ſoft ſubſtance, is betwixt four and five inches in diameter, and about two feet and a half in height, ſeparating there into ſeveral branches, bearing round, ſerrated, rough, and thick leaves, and ſo large that their diameter, when full grown, is ſeldom leſs than a foot and a half, and ſometimes two feet. Before the plant is fit to be cut, when the leaves begin to turn red, the peaſants make an inciſion into the bark, and ſuck the juice, which is very cooling and aſtringent; but as ſoon as ever the leaf is obſerved to turn white, an indication of decay, they cut the plant down at the root, take off the branches, and divide the ſtalk into ſhort pieces, which being dried in the ſun, make an excellent tan.

Besides this rich variety of productions, on the ſurface of the earth, the country alſo abounds with valuable mines and quarries; particularly of Lapis lazuli

lazuli and loadſtone, copper equal to the beſt of Europe; beſides ſeveral of gold; but no advantage is derived from any; the inhabitants, contented with the plentiful enjoyment of all the neceſſaries of life, extend their wiſhes no farther, leaving to the curioſity and avarice of others, the laborious ſearch after what the earth contains in its bowels.

THIS kingdom of Chili ſeems alſo to have been the firſt country of thoſe famous horſes and mules, mentioned in the firſt volume. Indeed all theſe creatures found in America, owe their origin to ſome imported from Spain. At preſent, however, thoſe of Chili ſurpaſs not only thoſe of the other parts of America, but even thoſe of Spain, from whence they are derived. The horſes firſt brought over might poſſibly have been of the running kind, Spain ſtill abounding in that ſort. But it muſt be owned, that greater care has been taken here of preventing the breed from being mixed with others of a leſs generous ſpecies; and by this means they greatly exceed thoſe of Spain; for without any other incentive than their own inclination, before they will ſuffer any other to get before them, they will exert their utmoſt ſtrength; and at the ſame time their motion is ſo eaſy, that the rider is not the leaſt fatigued. In beauty and graceſulneſs they are not inferior to the famous Andeluſian horſes, and at the ſame time full of ſpirit. Accordingly they are every where ſo highly valued, that a more acceptable preſent cannot be made to a perſon of the greateſt diſtinction, than one of theſe beaſts. Many purchaſe them for parade, and beſides their being common all over the kingdom, they have been ſent even to Quito. The great demand for them, and conſequently their high price, has induced the inhabitants of ſeveral countries to attempt the breeding of them; but none are equal to thoſe of Chili.

THE commerce at Conception might be conſiderably increaſed, were the country, which is far from

being the caſe, inhabited in any proportion to its fertility and extent; but for want of a ſufficient number of hands, their commerce is at a very low ebb, conſiſting almoſt intirely in proviſions, wine, &c. and this is ſo ſmall, that it is chiefly carried on by only a ſingle ſhip coming once a year from Callao to load with them, together with a few others trading to Chiloe or Baldivia, and in their return touch here. Their exports are tallow, graſſa, cordovan, bend leather, excellent butter, wines, and dried fruits. The goods brought hither in exchange are the ſeveral ſorts of woollen ſtuffs from Quito, and others from Europe, iron, and mercury. Very few European goods are however imported; for the people here not being remarkable for their riches, uſe only home-made ſtuffs and bays, which though extremely good are in no great quantity. The commerce carried on between the inhabitants of Chili, and the Arauco Indians, ſhall be mentioned in its proper place.

CHAP. VI.

Deſcription of Conception Bay; *its roads or harbours, fiſh*, &c. *and the ſingular mines of ſhells in its neighbourhood.*

THE bay of Conception, beſides its excellent bottom, is of ſuch an extent, as not to be equalled by any on the whole coaſt. For from Tierra Firma, north and ſouth, its length is nearly three leagues and a half, and its breadth from eaſt to weſt, almoſt three leagues, being the diſtance betwixt the harbour of Talcaguano, and the Cirillo virde, or little green mountain, ſituated near the city; from whence its breadth is contracted by the iſland of Quiriquina, which lying in the mouth of

of it, forms two entrances, of which that on the eaſt ſide is the ſafeſt, being two miles in breadth, and accordingly frequented by moſt ſhips. The weſt entrance is between the iſland and Talcaguano point, and is near half a league in breadth. In the principal entrance of this bay is thirty fathom water, which depth afterwards decreaſes to eleven and ten, till within about a mile of the ſhore, oppoſite to the entrance. The weſtern, though the many rocks and breakers in it make it appear very dangerous, has a channel with water ſufficient for the largeſt ſhip, the depth being at firſt thirty fathom, and never leſs than eleven; it is ſituated in the middle of the entrance, that is at an equal diſtance between the rocks which project about a quarter of a league from Talcaguano point, and Quiriquina.

WITHIN the bay are three roads or harbours, where ſhips anchor; for though the bottom be every where clear, it is only in one of theſe three places ſhips can ride in ſafety, being no where elſe ſheltered from the wind. The firſt called Puerto Tome, lies E. and W. with the N. point of Quiriquina, contiguous to the coaſt of Tierra Firma. The anchoring place is about half a league diſtant from the land, in about twelve fathom water. But this road is only uſed when ſhips come in during the night, it being difficult to reach either of the other two before day light, as ſeveral tacks muſt be made for that purpoſe.

IN this bay the principal port is that of Talcaguana. It is properly an elbow, and bears S. S. W. from the S. point of Quiriquina. This is by far the moſt frequented, ſhips in general anchoring here, having not only better ground than any other part of the bay, but are in ſome meaſure ſheltered from the N. winds. Whereas at Ciriilo-verde, they lie expoſed, not only to theſe, but alſo to the S. winds, the land which ſhould intercept them being low. Beſides the bottom is of a looſe mud, ſo that the anchors

in a hard gale of wind, generally come home; and conſequently the ſhips in great danger of being ſtranded on the coaſt. From theſe inconveniences it may be concluded, that the only ſhips which anchor here, are ſuch as happen to be in thoſe parts in the midſt of ſummer, and are in haſte to take in their loading, for which this road is moſt convenient, as being neareſt the city.

Two rivers empty themſelves into this bay, one of which paſſing through the city of Conception, has thence the ſame name; the other is called St. Pedro. The firſt is the watering place for ſhips anchoring at Cirillo Verde; whereas thoſe at Talcaguano, ſupply themſelves with that neceſſary fluid from ſome ſtreams which flow from the adjacent eminences; they eaſily take on board a ſufficient quantity of wood, of which there is here plenty; as of all other neceſſaries.

Ships, before they enter the bay of Conception, endeavour to make the iſland of Santa Maria, and then coaſt along it, keeping at the ſame time, a good look out for a reef of rocks which ſtretches out almoſt three leagues from the N. W. point; thence they continue their courſe, keeping at a little diſtance from the main, there being no rocks but what are above water. After weathering the real of rocks on the iſland of Santa Maria, they ſteer directly for Talcaguano point, at the diſtance of about half a league; from which ſeaward, is a rock called Quiebraollas, which muſt be the more carefully avoided as it is ſurrounded with ſhoals. There is, however, no danger, if the ſhip be not nearer than half a mile; indeed there is a ſufficient depth of water within a cable's length. After their being abreaſt of this rock they ſteer for the N. point of Quiriquina, off which lie two rocks, but the fartheſt from the ſhore is only a quarter of a league, and may be ſafely approached within a ſtone's caſt. Both theſe rocks ſwarm with ſea-wolves; and as there is

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a ſufficient depth of water all round them, there is no other danger in ſtanding near them, than what may be ſeen. There is indeed a neceſſity for ſtanding near them, to avoid falling to leeward of the bay. After paſſing them, the courſe is continued as near as poſſible to the iſland of Quiriquina, taking care to avoid ſome other rocks lying along the ſhore.

As ſhips are generally obliged to make ſeveral tacks in order to get into Conception bay, care muſt be taken not to approach too near the iſland of Quiriquina, either on the E. or S. ſides; for though the coaſt is bold on the N. and N. W. ſides, there is a ſhoal on the S. extending to a conſiderable diſtance from the ſhore. At a third part of the diſtance between the road at Talcaguano, and the point of the ſame name, is another ſhoal, running about half a league to the eaſtward. In the middle of it is a ledge of rocks, whoſe tops are dry at low water. To avoid this ſhoal, though the thick water ſufficiently indicates it, the beſt way is, at entering the mouth of the bay with a land wind, to ſteer directly for the middle of a ſpot of red earth on a mountain of a middling height, ſituated at the bottom of the bay, continuing this courſe till the ſhip is paſſed the ſhoal; and then ſteer directly for the houſes at Talcaguana, till within about half a mile from the ſhore, which is the uſual anchoring place in five or ſix fathom water; Cape Harradura being covered by the iſland of Quiriquina. The ſame care is alſo neceſſary to avoid another reef of rocks, lying between the Morro and the coaſt of Talcaguana; nor muſt the Morro ſide be approached too near, there being a ſand ſtretching all along from that reef of rocks to Cirillo Verde. The ſhips riding at Talcaguana in the manner thus preſcribed, are ſheltered from the N. wind; but not entirely ſo from the ſea, which in thoſe winds runs very high, and pours in through both entrances. The goodneſs of the bottom, however, ſecures the ſhip. During the force of theſe winds

winds there is no poſſibility of landing on account of the great ſea; but in fair weather, every place is convenient for going on ſhore.

The country round the bay, particularly that between Talcaguana and Conception, within four or five leagues from the ſhore, is noted for a very ſingular curioſity, namely, that at the depth of half or three quarters of a yard beneath the ſurface of the ground, is a ſtratum of ſhells of different kinds, two or three toiſes in thickneſs, and in ſome places even more, without any intermixture of earth, one large ſhell being joined together by ſmaller, and which alſo fill the cavities of the larger. From theſe ſhells all the lime uſed in building is made; and large pits are dug in the earth for taking out thoſe ſhells, and calcining them. Were theſe ſtrata of ſhells found only in low and level places, this phænomenon would be more eaſily accounted for by a ſuppoſition no ways improbable, namely, that theſe parts were formerly covered by the ſea, agreeable to an obſervation we made in our deſcription of Lima. But what renders it ſurpriſing is, that the like quarries of the ſame kind of ſhells, are found on the tops of mountains in this country, fifty toiſes above the level of the ſea. I did not indeed perſonally examine the quarries on the higheſt of thoſe mountains; but was aſſured of their exiſtence by perſons who had lime kilns there; but I ſaw them myſelf on the ſummits of others at the height of twenty toiſes above the ſurface of the ſea; and was the more pleaſed with the ſight, as it appeared to me a convincing proof of the univerſality of the deluge. I am not ignorant that ſome have attributed this to other cauſes; but an unanſwerable confutation of their ſubterfuge is, that the various ſorts of ſhells which compoſe theſe ſtrata both in the plains and mountains, are the very ſame with thoſe found in the bay and neighbouring places. Among theſe ſhells are three ſpecies

cies very remarkable: the firſt is called Choros, already mentioned in our deſcription of Lima; the ſecond is called Pies de Burros, aſſes feet; and the third Bulgados, and theſe to me ſeem to preclude all manner of doubt that they were originally produced in that ſea, from whence they were carried by the waters, and depoſited in the places where they are now found.

I HAVE examined theſe parts with the cloſeſt attention, and found no manner of veſtige of ſubterraneous fires. No calcinations are to be met with on the ſurface of the earth, nor among the ſhells; which, as I have already obſerved, are not intermixed with earth; nor are there ſtones, or any other heterogeneous ſubſtances found among them. Some of theſe ſhells are entire, others broken; as muſt naturally happen in ſuch a cloſe compreſſion of them, during ſo long an interval of time. This circumſtance, however trifling it may appear to ſome, may deſerve the conſideration of thoſe who have advanced the notion, that ſhells may be formed in the earth by ſubterraneous fires, co-operating with the nature of the ſoil.

THE Pie de Burro, has its name from the fiſh incloſed in it, reſembling, when taken out, the foot of an aſs. This fiſh is of a dark brown colour, firm and filaceous; it is an univalve, its mouth almoſt circular, and its diameter about three inches. The bottom of the ſhell is concave within, and convex without. The colour within is perfectly white, the ſurface very ſmooth; the outſide ſcabrous and full of tubercles. Its thickneſs in every part is about four or five lines; and being large, compact, and heavy, is preferred to all others for making lime.

THE Bulgados, in the Canaries called bulgaos, are ſnails, not at all differing in their form from the common; but larger than thoſe of the ſame name found in gardens, being from two inches, to two inches and a half in diameter. The ſhell is alſo very thick, rough on

on the outſide, and of a dark brown colour; and, next to the preceding, makes the beſt lime.

All theſe ſpecies of ſhell-fiſh are found at the bottom of the ſea in four, ſix, ten and twelve fathom water. They are caught by drags; and what is very remarkable is, that no ſhells, either the ſame, or that have any reſemblance to them, are ſeen either on the ſhores continually waſhed by the ſea, or on thoſe tracks which have been overflowed by an extraordinary tide. They adhere to a ſea plant, called Cochayuyo lake herb, the Indians making no nominal diſtinctions between the inland lakes, and the ſea, calling both cochas. This plant reſembles the bejuco; its diameter is about half an inch, and from its root to its extremity of an equal thickneſs. In length is from twenty to thirty toiſes, producing at every eighteen inches, or ſomething more, a leaf about a yard and a half, or two yards in length; but the breadth, which is in every part the ſame, does not exceed two or three inches. It is remarkably ſmooth, which, together with a viſcid liquor, with which it is covered, gives it a very fine gloſs. The ſame may be ſaid of the ſtem, which is extremely flexible, and ſtrong. Its colour is of a pale green, but that of the leaves more vivid. This plant divides itſelf into ſeveral branches, equal in dimenſions to the main ſtem. Theſe branches ſucceſſively produce others of the ſame proportion; ſo that the produce of one ſingle root covers a prodigious ſpace. At the joints where the branches ſpring, are found this kind of ſhell-fiſh, where they both receive their nouriſhment, and propagate their ſpecies. The extremities of theſe Cochayuyos, float on the ſurface, and in ſome lakes, where the water has remained a long time undiſturbed, form a kind of carpet. At the junction of the ſtalk of every leaf with the ſtem, is a berry reſembling a caper, but ſomething larger, ſmooth and gloſſy on the ſurface, and exactly of the ſame colour with the ſtem.

The

THE ſeas on theſe coaſts abound in excellent fiſh, though not in ſo great a degree as thoſe near Juan Fernandes. Here are ſeen, in particular, a great number of whales, which come even into the bay; alſo tunny-fiſh and ſea-wolves. Among the amphibious creatures here is one known all along theſe coaſts, and even at Callao. It is called Pajaro Nino, the bird-child. It in ſome parts reſembles a gooſe, except that its neck and bill are not arched, and is ſomething larger. It has a thick neck, a large head, and a ſtrong ſhort bill. It legs very ſmall, and in walking the body is in an erect poſition. Its wings are ſmall, cartilaginous, and nearly reſemble the fins of the ſeal. Its tail is ſo ſmall as hardly to be diſtinguiſhed; its wings and whole body are covered with a ſhort brown hair like that of the ſea-wolves, and generally full of white ſpots, though ſome are of other colours. So that upon the whole, the bird makes no diſagreeable appearance. It lives promiſcuouſly either in the water or on the land; on the latter it is eaſily taken, being very ſlow in its motions; but when attacked, bites ſeverely, though it is obſerved never to be the firſt aggreſſor.

CHAP. VII.

Deſcription of the City of SANTIAGO, *the Capital of the Kingdom of* CHILI.

AFTER giving an account of all the cities and places of note, through which we paſſed, I muſt not omit the capital of the kingdom of Chili. We had not indeed occaſion to viſit it perſonally; but by the informations we received from perſons beſt qualified to anſwer our inquiries, in the ports of its juriſdiction, to which our affairs called us more than once, we are enabled to gratify the curioſity of a rational reader.

THE

The city of Santiago, originally called Santiago de la Nueſtra Eſtremadura, was founded by captain Pedro de Valdivia, who began the foundation on the 24th of February 1541, in the valley of Mapocho, near that of Chili, which gives its name to the whole kingdom. It has not been ſubject to the revolutions of other places, but ſtill ſtands on its original ſpot, which is nearly in 33° 40′ ſouth latitude, and about twenty leagues from the harbour of Valparaiſo, the neareſt port to it in the South Seas. It ſituation is one of the moſt convenient and delightful that can be imagined, ſtanding in a delightful plain of twenty-four leagues in extent, watered by a river flowing in meanders through the middle of it, and called by the ſame name of Mapocho. This river runs ſo near the city, that by means of conduits, the water is conveyed from it through the ſtreets, and alſo ſupplies the gardens, which few houſes here are without, and hence the delightful ſituation of the place, and the pleaſure of the inhabitants are greatly heightened.

The city is a thouſand toiſes in length from E. to W. and ſix hundred in breadth from N. to S. On the ſide oppoſite the river, which waſhes the N. part of it, is a large ſuburb, called Chimba; and on the E. ſide, almoſt contiguous to the houſes, is a mountain of a middling height, called Santa Lucia. The ſtreets are all of a handſome breadth, paved and ſtraight; ſome run exactly in an E. and W. direction, and are croſſed by others, lying exactly N. and S. Near the middle of the city is the grand piazza, which, like that of Lima, is ſquare, with a very beautiful fountain in the center. On the N. ſide are the palace of the royal audience, where the preſidents have their apartments, the town-houſe, and the public priſon. The W. ſide is taken up by the cathedral and the biſhop's palace. The S. ſide conſiſts of ſhops, each decorated with an arch; and the E. is a row of private houſes. The other parts of the city are divided into inſulated ſquares of houſes, regular,

regular, and of the ſame dimenſions with thoſe of Lima.

THE houſes here are built of adoves, or unburnt bricks, and very low; this neceſſary caution againſt the terrible devaſtation of earthquakes being equally neceſſary here as in all other towns of Peru, calamities with which this city has been often viſited; but the moſt remarkable are the following.

1. IN the year 1570, an earthquake happened, which overflowed ſeveral mountains in this kingdom; many villages were entirely deſtroyed, and great part of the inhabitants buried in their ruins.

2. IN the year 1647, on the 13th of May, many of the houſes and churches of this city were ruined by another ſhock.

3. IN 1657, on the 15th of March, the earth was obſerved to have a tremulous motion for the ſpace of a quarter of an hour, and few of the buildings in the city were left ſtanding.

4. IN 1722, on the 24th of May, great part of the houſes were damaged by another earthquake.

5. IN the year 1730, on the 8th of July, happened that tremendous earthquake already mentioned in our account of Conception. This ſhock not only ruined the greateſt part of the city, but concuſſions were often felt for many months afterwards; and this cataſtrophe was ſucceeded by an epidemical diſtemper, which ſwept away even greater numbers than had before periſhed by the earthquake.

NOTWITHSTANDING the houſes are low, they make a handſome appearance, and are well contrived both for pleaſure and convenience.

BESIDES the cathedral and the pariſh church of the Sagrario, here are two others, namely, that of St. Anne, and St. Iſadoro. There are alſo three convents of St. Franciſco, San Diego, a college for ſtudents, and, without the city, a convent of Recollects; two of Auguſtines, one of Dominicans, one of the Fathers of Mercy,

one of St. Juan de Dios, and five colleges of Jeſuits, namely, St. Michael, the Noviciate, St. Paul, St. Xavier, a college for ſtudents, who wear a brown cloak, and a red ſcarf, and the college, called La Olleria, for the exerciſes of St. Ignatius. Here are alſo four nunneries, two of St. Clare, two of Auguſtines, and one of Carmelites, and a religious ſiſterhood, under the rules of St. Auguſtine. All which have a large number of recluſes, as is common in all the cities of Peru. The churches of the convents, beſides being very ſpacious, are built either of brick or ſtone, and thoſe of the Jeſuits are diſtinguiſhed by the beauty of their architecture. The pariſh churches are in every reſpect greatly inferior to them,

The inhabitants of Santiago are computed at about four thouſand families, and of theſe nearly one half are Spaniards of all degrees; and among them ſome very eminent both for rank and opulence. The other moiety conſiſts of Caſts and Indians, but chiefly of the latter.

The cuſtoms here differ very little from thoſe already mentioned in our account of large cities. They are not ſo negligent in the care of their apparel as at Conception; and inſtead of the oſtentation of Lima, they follow the modeſt decency of Quito. The men, except on ſome particular ceremonies, generally wear ponchos, and all the families who can any way afford it, keep a calaſh for driving about the city. The men are robuſt, of a proper ſtature, well ſhaped, and of a good air. The women have all the charms of thoſe of Peru, and are rather more remarkable for the delicacy of their features, and the fineneſs of their complexions; but they diſfigure their natural beauty by a miſplaced art, painting themſelves in ſuch a prepoſterous manner, as not only to ſpoil the natural delicacy of their ſkin, but even their teeth; ſo that it is very rare to ſee a woman here of any age with a good ſet.

In

IN this city is a royal audience, removed hither from Conception. It consists of a president, four auditors, and a fiscal, together with another officer dignified with the endearing title of patron of the Indians. The determinations of this court are without appeal except to the supreme council of the Indies, and this is only in matters of notorious injustice, or denial of redress.

THE president, though in some particulars subordinate to the Vice-roy of Lima, is also governor and captain-general of the whole kingdom of Chili; and, as such, he is to reside one half of the year at Conception, and the other at Santiago. During his absence from the last city, the corregidor acts as his representative; and his jurisdiction, on this occasion, extends to all the other towns, except the military governments.

THE magistracy, at the head of which is the corregidor, consists of regidores, and two ordinary alcaldes. In these are lodged the police, and civil government of the city; and during the time the president resides here, the jurisdiction of the corregidor is limited to the liberties of Santiago.

THE office for the royal revenue, is directed by an accountant and treasurer; where are paid the tributes of the Indians, and other parts of the revenue; the salaries of officers within its department, and other assignments.

THE chapter of the cathedral consists of the bishop, dean, archdeacon, chanter, four canons; and other subordinate ecclesiastics.

HERE is also a tribunal of Croisade, the members of which are a subdelegate commissary, an accountant, and treasurer. Likewise a commission of inquisition, all the officers of which are appointed by the tribunal of inquisition at Lima.

THE temperature of the air at Santiago is nearly the same with that of Conception. The luxuriancy of soil, and exuberance of all kinds of provisions, the

commerce, and other neceſſary particulars, I ſhall mention in the following account of the kingdom of Chili.

CHAP. VIII.

Account of that part of Chili *within the juriſdiction of the audience of* Santiago.

THE kingdom of Chili extends from the frontiers of Peru to the ſtreights of Magellan, the diſtance being five hundred and thirty leagues. Theſe two kingdoms, as I have mentioned in another place, are ſeparated by the deſart of Atacamo, which extends eighty leagues between the province of the ſame name, being the laſt of Peru, and the valley of Copoyapu, now corruptly called Copiapo, the firſt in Chili, and in every particular reſembles the deſart of Sectura. Eaſtward, ſome parts of this kingdom terminates on the frontiers of Paraguay, though ſome uninhabited deſarts intervene; and others border on the government of Buenos Ayres. Though between these are the Pampas or extenſive and level plains. Its weſtern boundary is the ſouth-ſea, extending from 27 degrees nearly, the latitude of Copiapo, to 53° 30′. But to confine ourſelves to the true extent of this kingdom, as inhabited by the Spaniards, it begins at Copiapo, and terminates at the large iſland of Chiloe, the ſouthern extremity of which is in 34° of S. latitude; and its extent from W. to E. is the diſtance between the Cordillera, which is here of a ſtupendous height, and the coaſt of the ſouth-ſea; that is, about thirty leagues.

Part of the country which at preſent compoſes the kingdom of Chili, was ſubjected to the empire of the Yncas by Yupanqui, the tenth emperor; who, incited by the inchanting account given of theſe provinces,

provinces, undertook the conqueſt of them; and proſecuted the enterprize with ſuch ſucceſs, that he ſubdued the ſeveral nations inhabiting the valleys of Copoyapu or Copiapo, Coquimpu or Coquimbo, and Chili. But in his intended career ſouthward, the victorious Ynca met with an unſurmountable difficulty from the Purumauco Indians, and other nations, whom the rapidity of his conqueſts had induced to oppoſe him by a general confederacy. Thus he found himſelf under a neceſſity of deſiſting, after having carried his arms as far as the river Mauli, which is in the latitude of 34° 30′.

AFTER the Spaniards had undertaken a deſcent in Peru, and made themſelves maſters of its ſeveral provinces, the marſhal Don Diego de Almagro was commiſſioned for the conqueſt of Chili. Accordingly he marched from Cuſco at the beginning of the year 1535, and after loſing the greateſt part of his Indians, and a conſiderable number of Spaniards, who periſhed with cold in paſſing over the Cordillera Nevada, he arrived at Copiapo, where the Indians, without trying the chance of war, ſubmitted. Animated with ſuch unexpected puſillanimity, he proceeded to the conqueſt of other nations; even ſuch as never had acknowledged the Yncas. And though he here met with a more warlike people, who were determined to ſell their liberty dear, he carried on the war proſperouſly. But his majeſty, in conſideration of his great ſervices, performed with ſo much hazard, having conferred on him the government of a territory a hundred leagues in length, ſouth of that which belonged to the marquis Don Franciſco Pizarro, a difference aroſe between theſe two great men, with regard to the boundaries of their reſpective governments. Almagro, impatient to take poſſeſſion, and pretending that the city of Cuſco ought to be included in his government, the conqueſt was ſuſpended, and he himſelf haſtened to that city, where inſtead of being inveſted

with the chief command, he fell a sacrifice to the jealousy of Hernando Pizarro, who endeavoured to conceal his irregular proceedings under the veil of justice.

In the year 1541, the conquest of Chili was again set on foot, and the marquis Pizarro conferred the command on Pedro do Valdivia, together with the title of general. Accordingly he marched into the country, and founded most of the principal towns, and villages in it. So that in the year 1548, he was promoted to the government of it, by the president of Peru. In the prosecution of the conquest of these provinces, he had many sharp skirmishes with the natives, till at last, in the year 1553, bravely opposing a general revolt, with a very inferior force, he fell fighting with the greatest intrepidity, at the head of his troops, the greatest part of whom, enraged at losing so brave a man, chose to perish with him rather than save themselves by flight. His name, besides the figure it makes in history, is still preserved in this country in the town of Valdivia, which he founded.

The martial genius of the Indians of this kingdom, considerably retarded the reduction of it; and has always been the chief cause why the Spanish settlements here, are so little proportional to the extent, fertility, and riches of the country. Accordingly the captain-generalship of this vast kingdom has only four particular governments, and eleven jurisdictions; which are the following.

Particular governments in the kingdom of Chili.

I. The major-generalship of the kingdom of Chili.
II. Valparaiso.
III. Valdivia.
IV. Chiloe.

Jurisdictions in the kingdom of Chili.

I. Santiago.
II. Rancagua.
III. Colchagua.
IV. Chillan.
V. Aconcagua.
VI. Melipilla.
VII. Quillota.
VIII. Coquimbo.
IX.

IX. Copiapo, & Guaſco. X. Mendoza.
XI. La Conception.

I. To the major-generalſhip of the kingdom of Chili, belongs the military government of the frontier towns and fortreſſes. Theſe are Arauco, the ſtated reſidence of the general. Santajuana, Puren, Los Angeles, Tucapel, and Yumbel. It will be here neceſſary to obſerve, that not above five leagues ſouth of Conception bay, the ſea receives a river called Biobio, both the ſouth banks and head of which are inhabited by wild Indians: and to prevent their incurſions, ſtrong forts have been erected along the banks, and are always well garriſoned and furniſhed with all kinds of military ſtores. Among theſe on the ſouth banks of the river is the fort of Arauco, and the others at a proper diſtance eaſtward to the mountain of Tucapel. Thus all attempts from theſe Indians is precluded, and the Spaniſh ſettlements protected from their depredations. The general is obliged to viſit theſe forts from time to time, carefully inſpecting into their condition, and, in caſe of neceſſity, to haſten to their relief. During his abſence, the commanding officer of each is the captain of the garriſon, which uſually conſiſting both of horſe and foot with their officers, the perſon on whom the command devolves is previouſly nominated. This important poſt is in the diſpoſal of the preſident, as ſuppoſed to be beſt acquainted with the merits of the ſeveral competitors when a vacancy happens; and that the ſafety of his government will induce him to prefer the moſt deſerving. Accordingly whoever intends to offer himſelf a candidate for this poſt, ſhould ſolicit to be employed in the frontier ſervice, procure a competent knowledge of the ſtratagems of the Indians, and be very attentive to diſtinguiſh himſelf on any alarm, or encounter. It is indeed expreſſed in the royal commiſſion, that the corregidor of Con-

ception, shall be the military commander in chief; and, consequently, it is to him that the appointment of the general properly belongs; but this, from very powerful reasons, is dispensed with, the proper discharge of these two posts being utterly incompatible; and the civil and military requisite here very rarely meeting in the same person. But when this obstacle does not exist, and the corregidor is one of these extraordinary persons, the president, agreeable to the royal expression, confers the post of Maestre de campo on the corregidor of la Conception.

II. Valparaiso is the second military government. But the particular account of it, I shall refer for a more proper place.

III. Valdivia has a military governor nominated by the king. Here is also a good body of troops, both for garrisoning the place, and the forts built to defend the entrance of the river and harbours in it. Close to the river stands the town, the inhabitants of which are chiefly whites or Mestizos; but a village forming a kind of suburb is inhabited by friendly Indians. This government has undergone some vicissitudes in point of subordination, being sometimes independent of the presidents of Chili, and immediately subject to the Vice-roy of Lima; and at other times a part of the former. At last, on weighing the difficulties for providing for any sudden exigence, or having a watchful eye over its necessary concerns at so great a distance as Lima, it was annexed to the jurisdiction of the president of Chili, as being nearer at hand to see that the forces are always on a good footing, and constantly in a proper posture of defence.

IV. Chiloe has a military governor, who resides at Chacao, the principal harbour of the island, being well fortified and capable of making a good defence. Besides Chacas, which has the title of a city, is another place much larger, called Calbuco, where

where reſides a corregidor, who is nominated by the preſident of Chili. It has alſo regidores and alcaldes choſen annually. Beſides the pariſh church here, is a convent of Franciſcans, another of the Fathers of Mercy, and a college of Jeſuits. The iſland is every where well peopled with Spaniards, Meſtizos, and chriſtian Indians.

THE kingdom of Chili has continually a body of regular troops, conſiſting of five hundred men, for garriſoning Valparaiſo, a fort at Conception, and thoſe on the frontiers. One half of this body is infantry and the other cavalry. Under the major general who commands in chief is a ſerjeant major, whoſe duty it is to render them expert in all the various parts of military exerciſe; and that he may more conveniently render them ready at their ſeveral evolutions, he reſides at the fort of Jumbal, which lies in the center of the others. To theſe alſo belong a commiſſary general of the horſe, whoſe poſt is at Arauco, and in the abſence of the general has the command. Theſe troops have alſo a muſter-maſter general, who reſides at Conception. The ſtanding forces of Chili, till the beginning of this century, conſiſted of two thouſand men: but the great charge of ſupporting ſuch a body of troops, occaſioned them to be reduced to the preſent number.

THE produce of the revenue offices at Santiago and Conception, not being ſufficient to defray the expences of even this ſmall body, a remittance of 100,000 dollars, is every year ſent from Lima, half in ſpecie, and half in clothes, and other goods. But ſix or eight thouſand is annually deducted out of this ſum for repairing the forts of the frontiers, and making preſents to the deputies of the Indians who attend at conferences, or to ſatisfy thoſe who complain to the preſident of injuries received.

VALDIVIA alſo receives from the treaſury of Lima, an annual ſupply of 70,000 dollars, 30,000 in

in ſpecie, the value of thirty thouſand in clothes for the ſoldiers, and 10,000 in ſpecie, which is paid to the king's officers at Santiago, in order to purchaſe flour, charqui, graſſa, and other neceſſaries for the garriſon at Valdivia. Theſe remittances are conveyed in ſhips which ſail from Valparaiſo.

I. The juriſdiction of Santiago we have already obſerved to be limited to its boundaries.

II. Rancagua is a juriſdiction in the country, and owes its name from the inhabitants living in ſingle houſes, without the appearance of a village, every family in their lonely cottage, four, ſix, or more leagues from each other. It is not, however, without a kind of capital, conſiſting of about fifty houſes, and between fifty and ſixty families, moſt of them Meſtizos, though their caſt is not at all perceivable by their complexion. The whole juriſdiction may contain about a thouſand families, Spaniards, Meſtizos, and Indians.

III. Colchagua reſembles in every circumſtance the former, except its being better peopled; its inhabitants according to the beſt computations, amounting to fifteen hundred families.

IV. Chilan is a ſmall place, but has the title of city, the number of families, by an accurate calculation, not exceeding two or three hundred, and having few Spaniards among them.

V. Aconcagua is a very ſmall place at the foot of the mountains, but the country is interſperſed with a great number of ſingle houſes. The valley of the ſame name is ſo delightful, that a town called Phelipe le Real, was built in it in 1741.

VI. Melipilla made no better figure than the foregoing juriſdictions, till the year 1742, when a town was erected in it by the name of St. Joſeph de Longronno.

VII. Quillota. The town of this name does not contain

contain above a hundred families; but thoſe ſcattered over the country exceed a thouſand.

VIII. COQUIMBO, or la Serena, according to father Feville, ſtands in 24° 54′ 10″ ſouth latitude. This was the ſecond town built in the kingdom of Chili, in 1544, by Pedro de Valdivia, with a view of ſecuring the intercourſe between Peru and Chili, for the more convenient ſupply of what ſuccours might be wanted; and at the ſame time, for ſecuring the fidelity of the Indians who lived in that valley. This place is ſituated in the valley of Coquimbo, from whence it received its original name; but Valdivia gave it that of le Serena, from an affection to the province of that name in Spain, and of which he was a native. It ſtands about a quarter of a league from the coaſt of the ſouth-ſea in a moſt delightful ſituation, having an extenſive proſpect of the ſea, the river, and the country, which preſents the ſight with a charming variety of fields of different kinds of grain, and woods of a lively verdure.

THIS town is of itſelf large, but not proportionally peopled; the number of families not amounting to above four or five hundred, conſiſting of Spaniards, Meſtizos, and a few Indians. The ſtreets are ſtrait and of a convenient breadth, ſome of which lying N. and S. and others interſecting from E. to W. the town conſiſts of ſquares of buildings, like Santiago, and other places of note in this part of America. The houſes are all of mud walls, and covered with leaves; but none are without a large garden, well planted with fruit trees and eſculent vegetables, both thoſe of America and Spain; for the climate is happily adapted to a variety of both kinds, the heats not being exceſſive, nor the colds ſevere; ſo that both in the fertility of the earth, and the chearful appearance of the country, the whole year wears an aſpect of one perpetual ſpring. The ſtreets, though regular and convenient as abovementioned, are not entirely formed by

by the houſes, parts of the intervals between the ſeveral ſquares being filled up with gardens; and moſt of them have ſo charming an appearance, as to atone for the mean aſpect of the houſes.

Besides pariſh churches, here is a Franciſcan, a Dominican, and an Auguſtine convent; one belonging to the Fathers of Mercy, another to St. Juan de Dios; and a college of Jeſuits. The churches of theſe religious fraternities are large and decent. The pariſh church occupies part of one ſide of the great ſquare; and oppoſite is the town-houſe, where the alcaldes and regidores meet, who with the corregidor form the corporation.

On the N. ſide of Coquimbo runs the river, after flowing in various meanders through the whole valley of the ſame name; and by canals cut from it, furniſhes the town with water, one great uſe of which is to preſerve the beauty of their gardens.

IX. Copiapo is about twelve leagues from the ſea-coaſt, very irregularly built, but contains between three and four hundred families. The ſea-port neareſt to it is that known by the ſame name. There is indeed another port in this juriſdiction; but it lies thirty leagues farther to the S. and conſiſts only of a few huts.

X. Mendosa. The town of this name is ſituated on the eaſtern ſide of the Cordillera, at the diſtance of about fifty leagues from Santiago. It ſtands on a plain, and is decorated with gardens in the ſame manner as Coquimbo, and the place being well ſupplied with water by means of canals, no care is wanting to keep them in their greateſt beauty. The town conſiſts of about an hundred families, half Spaniards or whites, and the other half caſts. It has beſides a decent pariſh church, a Franciſcan, Dominican and Auguſtine convent, together with a college of Jeſuits. This juriſdiction has alſo two other towns, that of St. Juan de la Frontera, likewiſe

wiſe to the eaſtward of the Cordillera, and about thirty leagues N. of Mendoza, and St. Luis de Loyala, about fifty leagues eaſtward of Mendoza. The latter however is mean and ſmall, not containing above twenty-five houſes, and fifty or ſixty families, Spaniſh and caſts; though many more are ſcattered up and down the neighbouring country. In ſuch a ſmall place it is ſomething remarkable to ſee a pariſh church, a dominican convent, and a college of Jeſuits. Here the preſidents of Chili are received as governors of it, in their way to Chili from Buenos Ayres, this being the firſt place in their government on that ſide. The town of St. Juan de la Frontera is, in every reſpect, equal to Mendoza itſelf.

XI. THE juriſdiction of Conception is the laſt; but having already given an account of it, I ſhall proceed to conſider the commerce carried on by the kingdom of Chili with Peru, Buenos Ayres, Paraguay, and its own towns; and ſubjoin an account of that carried on with the wild Indians bordering on it, with the manner of maintaining a harmony with theſe ſavage people. In the mean time I ſhall conclude this chapter with obſerving, that the corregidors of the whole juriſdiction are nominated by the king, except thoſe of Rancagua, Melepilla, and Quillota, who are appointed by the preſident of Chili. This is indeed the caſe of all the others, when a corregidor happens to die, before a perſon is nominated to ſucceed him; but the office of theſe corregidors being only for five years, the prolongation muſt be by his majeſty's expreſs order. The inhabitants are formed into companies of militia, and every one knows the place of arms to which he is to repair on any alarm. Thus to Valparaiſo belongs the companies of militia of Santiago, Quillota, Melipilla, Aconcagua, and Rancagua; and theſe in all amount to between two or three thouſand men, and are formed into troops and companies.

nies. Rancagua, when Santiago and Colchagua are threatened, is alſo to ſend ſuccours thither; and the ſame duty lies on Chillan with regard to Conception. In theſe caſes notice is conveyed with ſuch diſpatch, that they are ſpeedily at their rendezvous, all they have to do, being to mount their horſes and repair to their ſtation with the uſual pace uſed in that country, which is always a gallop; and thus the militia of this country may be ſaid to ride poſt to the parts where danger calls them.

CHAP. IX.

Commerce of Chili. *Methods uſed to keep up a good Harmony with the wild Indians.*

IN my deſcription of the city of Conception, I mentioned the inchanting beauties of the neighbouring countries; and the exuberant returns of nature for the huſbandman's toil. The like profuſion of natural productions is ſeen all over this kingdom. Its plains, eminencies, valleys, in ſhort the whole country to the ſmalleſt portion of ground, is an object of admiration. Every particle of earth in this amazing fertility, ſeems transformed in ſeed. The country round Santiago, as it is not inferior in pleaſantneſs and fertility to that of Conception; ſo alſo from the great affinity to the climates, its products are nearly the ſame. Accordingly ſome farmers wholly apply themſelves to corn, others to fattening of cattle; ſome confine themſelves to the breeding of horſes, and others to the culture of vines and fruit trees. The firſt find their account in plentiful harveſts of wheat, barley, and particularly in hemp, which thrives here ſurpriſingly, and ſurpaſſes thoſe of the former. The ſecond at their large ſlaughters, have great quantities of tallow, graſſa, charqui, and ſole

ſole leather tanned. Of the goat ſkins is made Cordovan leather; ſome tallow is alſo procured from thoſe creatures. Wines are made here of ſeveral ſorts, and though not ſo excellent as thoſe of Conception, they are very palatable and of a good body; brandy is alſo diſtilled from them. Theſe are the principal articles of the active commerce of this kingdom with Peru, which it ſupplies with wheat, tallow, and cordage; and by the moſt careful eſtimate, the quantity of wheat ſent annually from Santiago to Callao, amounts to 140,000 Tanegas, each weighing one hundred and fifty-ſix pounds; about eight thouſand quintals of cordage; and between ſixteen and twenty thouſand quintals of tallow: beſides ſole leather, nuts, filberts, figs, pears, and apples; Graſſa, Charqui, and neat tongues: the three laſt being no inconſiderable articles.

THE more northern parts of the kingdom, as Coquimbo, produce olives, the oil of which is preferable to that of many parts of Peru; but being a natural commodity of that kingdom, and conſequently not an article of exportation, is conſumed at home. The country about Santiago, likewiſe, produces good olives; but in no great quantity, the genius of the inhabitants having not hitherto led them to make large plantations of thoſe trees.

BESIDES the commerce carried on with Peru in proviſions, there is that of metals, this kingdom abounding in mines of all kinds, but principally of gold and copper, which we ſhall briefly conſider.

THE moſt famous gold mine known in Chili, is called Petorca, and lies in a country E. of Santiago. This gold was formerly highly eſteemed, and found in great plenty; but now, on account of a whitiſh tinge, the value of it is conſiderably diminiſhed. This mine for the length of time it has been worked, is equal to the moſt celebrated in Peru.

IN the country of Yapel, which is ſituated in the ſame

ſame quarter, but farther to the northward along the Cordillera, are alſo rich gold mines, and the metal twenty-three carats fine. In 1710, in the mountains of Lumpanqui near the Cordillera, were diſcovered mines of gold, ſilver, copper, lead, tin, and iron, the gold between twenty-one and twenty two carats fine; but the working from the hardneſs of the ſtone, where, according to the miner's phraſe, "the metal arms," was very difficult and laborious. This inconvenience does not however occur in the mountain Llaoin, where the ſtone is ſoft, and not leſs rich in metal, equal in fineneſs to the former. Beſides theſe there are other gold mines, worked with good ſucceſs at Tiltil, near Santiago.

Betwixt Quillota and Valparaiſo, in a part called Ligua, is a very rich gold mine, and the metal greatly eſteemed. Coquimbo, Capiapo, and Guaſco, have alſo gold mines, and the metal found in the two laſt, is, by way of pre-eminence, called Oro Capote, being the moſt valuable of any yet diſcovered. Another kind of mines of the ſame metal has alſo been found in this kingdom; but theſe were exhauſted almoſt as ſoon as they were opened. Mines of this kind are very common, as well as another kind called Lavaderos *, moſt of which are between Valparaiſo and Las Pennuelas, and about a league from the former. Some of them are alſo found at Yapel, on the frontiers of the wild Indians, and near Conception. Theſe, together with the others known in this kingdom, yield gold duſt. Sometimes indeed lumps of gold of conſiderable magnitude are found; and the hopes of diſcovering theſe animate many to work the mines.

* Theſe Lavaderos are pits dug in the angles of ravins or trenches made by rain, and in which it is imagined there may be gold, and in order to diſcover the metal, a ſtream of water is turned through it, and the earth briſkly ſpread, that the gold may be carried down with the current, and depoſited in the pits.

ALL the gold thus collected in Chili is brought up in the country, and ſent to Lima to be coined, there being no mint in Chili; and by the accounts conſtantly taken, it amounts one year with another to ſix hundred thouſand dollars; but that clandeſtinely ſent by way of the Cordillera is ſaid to be nearly four hundred thouſand. Conſequently the whole muſt be at leaſt a million. In the countries of Coquimbo and Guaſco mines of all kinds of metals are ſo very common, that the whole earth ſeems wholly compoſed of minerals; and it is here thoſe of copper are worked, and from them all Peru and the kingdom of Chili are furniſhed with that metal. But though this copper exceeds every thing of the kind hitherto known, the mines are worked with great caution, and no more metal extracted than is ſufficient to anſwer the uſual demand; and other mines, though known to be equally rich, are left untouched.

IN exchange for the grain, fruits, proviſions, and metals, which Chili ſends to Peru, it receives iron, cloth, and linen made at Quito, hats, bays, though not many of the latter, there being manufactures of the ſame kind in Chili, ſugar, cacao, ſweetmeats, pickles, tobacco, oil, earthen ware, and all kinds of European goods. A ſmall commerce is alſo carried on between the kingdom of Chili, Paraguay and Buenos Ayres, of which the latter is the ſtaple. The products of Paraguay, which indeed conſiſt only in its herb and wax, are carried thither, then forwarded to Chili, whence the herb is exported to Peru. Large quantities of tallow are alſo ſent to Mendoza for making of ſoap. In exchange for theſe commodities Chili ſends to Buenos Ayres linen and woollen ſtuffs, ſome of which are imported from Peru, and others manufactured in the country: alſo ponchos, ſugar, ſnuff, wine and brandy, the two laſt the traders chiefly buy at San Juan, as moſt

convenient for tranſportation. During the aſſiento for negroes, they are uſually brought to Chili from the factory at Buenos Ayres, the way of Peru being attended with great inconveniences; as in their journey from Panama, they take an opportunity of concealing themſelves among the farm-houſes; ſo that what with the great expence, and the numbers who die during their long rout, by the variety of climates, their purchaſe muſt conſequently be very high.

The home commerce of Chili, or that carried on within itſelf, chiefly conſiſts in the proviſions ſent to Valdivia to the amount of ten thouſand dollars, which as the deducted part of its remittance are ſent from Lima to Santiago for that purpoſe. Valdivia furniſhes the reſt of the places with cedar. Chiloe purchaſes from the other parts brandy, wine, honey, ſugar, the Paraguay herb, ſalt, and Guinea-pepper; and returns to Valparaiſo and Conception, ſeveral kinds of fine wood, in which the iſland abounds; alſo woollen ſtuffs of the country manufacture, made into ponchos, cloaks, quilts, and the like; together with hams, which from the particular delicacy of the flavour are in great requeſt even in Peru, and dried pilchards, the bay and coaſt of that iſland being the only places in the ſouth-ſea where the fiſh are caught.

Coquimbo ſends copper to Valparaiſo; for though all parts of the Cordillera, towards Santiago and Conception, abound in mines of that metal, and particularly a place called Payen, where ſeveral were formerly worked, and where maſſes of fifty or a hundred quintals of pure copper have been found, yet as theſe mines are now no longer worked, the whole country is under a neceſſity of receiving their copper from the Coquimbo and Guaſco mines; ſending thither in exchange cordovan leather and ſoap, made at Mendoza, from whence it is carried to Santiago, and thence ſold to different parts of the kingdom.

Having thus conſidered the trade of Chili in both par-

particulars, I ſhall next proceed to mention that carried on with the wild Indians, and this conſiſts in ſelling them hard ware, as bits, ſpurs, and edge tools; alſo toys, and ſome wine. All this is done by barter; for though the countries they inhabit are not deſtitute of gold, the Indians cannot be prevailed upon to open the mines; ſo that the returns conſiſt in ponchos, horned cattle, horſes of their own breeding, and Indian children of both ſexes, which are ſold even by their own parents for ſuch trifles; and this particular kind of traffick, they call reſcatar, ranſoming. But no Spaniard of any character will be concerned in ſuch barbarous exchanges, being carried on only by the Guaſos, and the meaneſt claſs of Spaniards ſettled in Chili. Theſe boldly venture into the parts inhabited by the Indians, and addreſs themſelves to the heads of the ſeveral families.

THE Indians of Arauco, and thoſe parts, are not governed by Caciques, or Curacas, like thoſe of Peru, the only ſubordination known among them being with regard to age, ſo that the oldeſt perſon of the family is reſpected as its governor. The Spaniard begins his negociation with offering the chief of the family a cup of his wine. After this he diſplays his wares, that the Indian may make choice of what beſt pleaſes him; mentioning at the ſame time the return he expects. If they agree, the Spaniard makes him a preſent of a little wine; and the Indian chief informs the community that they are at liberty to trade with that Spaniard as his friend. Relying on this protection, the Spaniard goes from hut to hut, recommending himſelf at firſt by giving the head of every family a taſte of his wine. After this they enter upon buſineſs, and the Indian having taken what he wanted, the trader goes away without receiving any equivalent at that time, and viſits the other huts, as they lie diſperſed all over the country, till he has diſpoſed of his ſtock. He then returns to the cottage of

the chief, calling on his cuſtomers in his way, and acquainting them that he is on his return home. Upon this ſummons, not one fails of bringing him to the chief's hut, what had been agreed on. Here they take their leave of him, with all the appearance of a ſincere friendſhip, and the chief even orders ſome Indians to eſcort him to the frontiers, and aſſiſt him in driving the cattle he has received in exchange for his goods.

Formerly, and even till the year 1724, theſe traders carried large quantities of wine, of which, as well as of all other inebriating liquors, the Indians are immoderately fond; but on account of the tumults and wars that aroſe from the intemperate uſe of ſpirituous liquors, this branch of trade has been ſuppreſſed, and no more wine allowed to be carried into the Indian territories, than what ſhall be judged neceſſary to give the maſters of families a cup by way of compliment, and a very ſmall quantity for trading. The happy effects of this prohibition are felt on both ſides; the Spaniards live in ſafety, and the Indians in peace and tranquility. They are very fair dealers, never receding from what has been agreed on, and punctual in their payments. It is indeed ſurprizing that a whole people, who are almoſt ſtrangers to government, and ſavage in their manners, ſhould, amidſt the uncontrouled gratification of the moſt enormous vices, have ſo delicate a ſenſe of juſtice, as to obſerve it in the moſt irreproachable manner in their dealings.

Abl the Indians of Arauco, Tucapel, and others inhabiting the more ſouthern parts of the banks of the river Biobio, and alſo thoſe who live near the Cordillera, have hitherto fruſtrated all attempts made for reducing them under the Spaniſh government. For in this boundleſs country, as it may be called, when ſtrongly puſhed, they abandon their huts, and retire into the more diſtant parts of the kingdom, where being

being joined by other nations, they return in ſuch numbers, that all reſiſtance would be temerity, and again take poſſeſſion of their former habitations. Thus Chili has always been expoſed to their inſults; and if a very few only call for a war againſt the Spaniards, the flame immediately ſpreads, and their meaſures are taken with ſuch ſecrecy, that the firſt declaration of it is, the murder of thoſe who happen to be among them, and the ravages of the neighbouring villages. Their firſt ſtep, when a war is agreed on, is, to give notice to the nations for aſſembling; and this they call Correa la Fletcha, to ſhoot the dart, the ſummons being ſent from village to village, with the utmoſt ſilence and rapidity. In theſe notices they ſpecify the night when the irruption is to be made, and though advice of it is ſent to the Indians who reſide in the Spaniſh territories, nothing tranſpires: nor is there a ſingle inſtance, among all the Indians that have been taken up on ſuſpicion, that one ever made any diſcovery. And as no great armaments are neceſſary in this kind of war, their deſigns continue impenetrable till the terrible executions withdraw the veil.

THE Indians of the ſeveral nations being aſſembled, a general is choſen, with the title of Toqui; and when the night fixed on for executing their deſigns arrives, the Indians who live among the Spaniards, riſe and maſſacre them. After which they divide themſelves into ſmall parties, and deſtroy the ſeats, farm-houſes and villages, murdering all without the leaſt regard to youth or age. Theſe parties afterwards unite, and in a body attack the larger ſettlements of the Spaniards, beſiege the forts, and commit every kind of hoſtility; and their vaſt numbers, rather than any diſcipline, have enabled them, on ſeveral occaſions, to carry on their enterprizes with ſucceſs, notwithſtanding all the meaſures taken by the Spaniſh governors to prevent them. For though multitudes of them fall on theſe occaſions, their army continually receives

larger reinforcements. If at any time the Spaniards gain the superiority, the Indians retire to the distance of several leagues, where after concealing themselves a few days, they suddenly fall on a different part from that where they were encamped, endeavouring to carry the place by a sudden assault, unless the commandant's vigilance has provided against any sudden surprize; when, by the advantage of the Spanish discipline, they are generally repulsed with great slaughter.

These Indian wars against the Spaniards usually continue some years, being of little detriment to the Indians; for most of their occupations which consist in the culture of a small spot of ground, and weaving ponchos and cloaks for apparel, are carried on by the women. Their huts are built in a day or two, and their food consists of roots, maize, and other grain. War, therefore, is no impediment or loss to them; indeed they rather consider it as a desirable occupation, their hours at other times being spent in idleness, or carousals, in which they drink chica, a liquor common among them, and made from apples.

The first advances towards a treaty of peace with these Indians are generally made by the Spaniards; and as soon as the propofals are agreed to, a congress is held, at which the governor, major-general of Chili, and the principal officers, the bishop of Conception, and other persons of eminence assist. On the part of the Indians the toqui, or generaliffimo, and the captains of his army, as representatives of the communities, repair to the congress. The last inroad made by these savage enemies, was in the year 1720, during the government of Don Gabriel Cano, lieutenant-general of his majesty's forces, who managed the war against them with such vigour and address, that they were obliged to solicit a peace; and their preliminaries were so submissive, that at a congress held in 1724, the peace was concluded, whereby they were left in possession of all the country south of the river Biobio; and

and the Capitaines de Paz were ſuppreſſed. Theſe were Spaniards reſiding in the villages of the converted Indians, and by their exactions had been the principal cauſe of the revolt.

BESIDES the congreſſes held with theſe Indians, for concluding a treaty of peace, others are held on the arrival of a new preſident, and the ſame ceremonies obſerved in both; ſo that an account of the one will be ſufficient to give a juſt idea of the other.

ON the holding a congreſs, the preſident ſends notice to the frontier Indians of the day and place, whither he repairs with the abovementioned perſons; and on the part of the Indians, the heads of their ſeveral communities; and both, for the greater ſplendor of the interview, are accompanied by an eſcort conſiſting of a certain number previouſly agreed on. The preſident and his company lodge in tents, and the Indians incamp at a ſmall diſtance. The elders or chiefs of the neighbouring nations pay the firſt viſit to the preſident, who receives them very courteouſly, drinks their healths in wine, and himſelf gives them the glaſs to do the like. This politeneſs, with which they are highly pleaſed, is ſucceeded by a preſent of knives, ſciſſars, and different ſorts of toys, on which they place the greateſt value. The treaty of peace is then brought on the carpet, and the manner of obſerving the ſeveral articles is ſettled: after which they return to their camp, and the preſident returns the viſit, carrying with him a quantity of wine ſufficient for a moderate regale.

Now all the chiefs of the other communities, who were not preſent at the firſt viſit, go in a body to pay their reſpects to the preſident. At the riſing of the congreſs, the preſident makes each a ſmall preſent of wine, which the Indians liberally return in calves, oxen, horſes, and fowls. After theſe reciprocal tokens of friendſhip, both parties return to their reſpective habitations.

In order to gain more effectually the hearts of these Indians, who, though in our esteem wretchedly poor, conceal the most stubborn pride, which can only be softened by compliments and favours, it is a maxim with the presidents to admit to their table those who are apparently of the best dispositions, and during the three or four days of the congress, neglects no means of ingratiating himself with the whole body. On these occasions a kind of fair is held at both camps, great numbers of Spaniards repairing thither with such goods as they know will please the Indians, who also come with their ponchos and cattle. Both parties deal by exchange, and never fail of selling their whole stocks; and of observing in their dealings the most exact candour and regularity, as a specimen in which all future commerce is to be conducted.

Though these Indians have shewn such a determined aversion to submitting to the Spanish monarchs, their behaviour has been very different to the missionaries, whom they voluntarily permitted to come among them; and many have even shewed the greatest joy at being baptized. But it is extremely difficult to prevail on them to quit their free manner of living; which being productive of vice and savageness, prepossess the mind against the precepts of the Christian religion. Before the war of the year 1723, the missionaries, by their indefatigable zeal, had formed several villages, hoping by that means to induce their converts to practise the doctrines of the Christian faith. These villages were called St. Christover, Santo Fé, Santa Juana, St. Pedro, and La Mocha, all of them being under the inspection of the Jesuits. The chaplains also of the forts on the frontiers had an additional salary for instructing a certain number of Indians. But on that general insurrection, their innate savageness returned, all these converts abandoned the missionaries and joined their countrymen. On

the

the re-eſtabliſhment of the peace, they again ſolicited the miſſionaries to come among them; and ſome communities have been ſince formed; but they are far ſhort of their former promiſing ſtate, it being very difficult to bring even this ſmall number to embrace a ſocial life.

AMIDST all the ſanguinary rage of theſe Indians in their hoſtilities againſt the Spaniards, they generally ſpare the white women, carrying them to their huts, and uſing them as their own. And hence it is, that many Indians of thoſe nations have the complexions of the Spaniards born in that country. In time of peace many of them come into the Spaniſh territories, hiring themſelves for a certain time to work at the farm houſes, and at the expiration of the term return home, after laying out their wages in the purchaſe of ſuch goods as are valued in their country. All of them, both men and women, wear the poncho and manta, which they weave from wool, and though it cannot be properly called a dreſs, it is abundantly ſufficient for decency; whereas the Indians at a greater diſtance from the Spaniſh frontiers, as thoſe who inhabit the countries ſouth of Valdivia, and the Chonos who live on the continent near Chiloe, uſe no ſort of apparel *. The Indians of Arauco, Tucapel, and other tribes near the river Biobio, take great delight in riding, and their armies have ſome bodies of horſe. Their weapons are large ſpears, javelins, &c. in the uſe of which they are very dextrous.

* Theſe Indians now dreſs like the former. A.

CHAP.

CHAP. X.

Voyage from Conception *to the Iſland of* Juan Fernandes; *and from thence to* Valparaiso.

THE ſhips being come to an anchor in the port of Talcaguano, we waited on Don Pedro de Mendinueta, at the city of Conception, who informed us that the commodore Don Joſeph Pizarro, together with the land and ſea officers, were arrived at Santiago, and that he intended to ſet out for Valparaiſo, in order to hoiſt his flag on board the Eſperanza, and take upon him the command of that ſquadron: on receiving this intelligence, and having no orders to continue at Conception, we put to ſea on the ſixth of February, and ſteering for the place of our deſtination, made, on the 20th, the iſland de Tierra de Juan Fernandes, and at half an hour after ten, as we were plying to windward along the coaſt, and ſtanding towards the iſland which then bore two leagues weſt from us, we ſaw on the top of one of the mountains a bright light, which ſurpized us the more, as on the following day we ſaw no traces of any ſhip's being in the port ſince we left it. I had a clear view of it from the inſtant it began, and obſerved that at firſt it was very ſmall, and increaſed, ſo as to form a flame like that of a flambeau. The full vigour of its light laſted about three or four minutes, when it diminiſhed in the ſame gradual manner it had increaſed. It did not appear again all the next night, nor had we during the whole time we were at anchor in the port, any view of ſuch a phænomenon. We ſent ſome of our people on ſhore to examine all the mountains, and other parts of the iſland, and they ſpent ſeveral nights on that and the adjacent mountains, but could not diſcover the leaſt veſtige of any fire. As I knew the iſland

iſland to be abſolutely deſtitute, the ſanguine colour of the flame, inclined me to think there might be ſome volcano; but having never ſeen any thing of that kind before, nor heard from others that there was ever any eruption, I was far from being tenacious of my opinion. We had indeed all our conjectures; but the difficulty was not cleared up till my fifth and laſt voyage to this iſland, when Don Joſeph Pizarro, ſent ſome people on ſhore to take an accurate ſurvey of this place, and the ground was found to be burnt, full of fiſſures and hot, which verified my firſt opinion of a volcano.

ON the 21ſt after coaſting along this iſland, we continued our courſe for Valparaiſo, where our little ſquadron came to an anchor on the 24th, and were the more pleaſed as we found there the preſident of Santiago, Don Joſeph Manſo, and our commodore; and in the harbour, beſides the Callao fleet, three French ſhips, called the Louis Eraſme, Notre Dame de la Delivrance, and the Lys, which had been freighted by four merchants as regiſter ſhips; and Valparaiſo was the firſt port they had touched at, for vending their cargoes.

FROM ſeveral obſervations made in this harbour by Don George Juan, in the laſt voyage of 1744, its latitude appears to be 33° 02′ 36″ 30‴ and father Feuillee ſettled its longitude at 304° 11′ 45″ from the meridian of Teneriff. This town was at firſt very mean, conſiſting only of a few warehouſes built by the inhabitants of Santiago for laying up their goods till ſhipped off for Callao, the harbour of Valparaiſo being the neareſt port to that city, from which it is only twenty leagues diſtant, though the natives will have it to be more. The only inhabitants at that time were the few ſervants left by their reſpective maſters for taking care of the warehouſes, and managing their mercantile affairs. But in proceſs of time, the merchants themſelves, together with ſeveral other families, removed from

from Santiago, in order to be more conveniently situated for trade; since which it has gradually increased, so that at present it is both large and populous; and would be still larger were it not for its inconvenient situation, standing so near the foot of a mountain, that a great part of the houses are built on its acclivity, or in its breaches. The broadest and most convenient part is that along the coast, but this is very unpleasant in winter, being so exposed to the N. winds, that the waves beat against the walls of the houses, some of which are built of unburnt bricks, some of chalk and pebbles, and others of bajareques.

Valparaiso, besides its parish church, has a convent of Franciscans, and another of Augustines; but very few religious, and the churches belonging to them small and mean. It is inhabited by families of Spaniards, and Casts, both Mulattoes, and Mestizos. In its neighbourhood are several villages, and the great number of farm houses give the country a chearful appearance. Here is a military governor nominated by the king, who having the command of the garrisons in the several ports, and of the militia of the place and its dependencies, is to take care that they are properly disciplined.

The proximity of this port to Santiago has drawn hither all the commerce formerly carried on at that city. To this it owes its foundation, increase, and present prosperity. At present all the Callao ships which carry on the commerce between the two kingdoms come hither. The cargoes they bring are indeed but small, consisting only of the goods already mentioned, as not produced in Chili. But in this port they take in wheat, tallow, cordovan leather, cordage, and dried fruits, and with these return to Callao; and a ship has been known to make three voyages in one summer, namely, between November and June, during which interval, the droves of mules and carriages from all the farm houses in the jurisdiction of Santiago, bring fresh supplies to the warehouses, that trade is carried

carried on both by land and ſea. The maſters of ſhips, who generally reſide at Lima or Callao, enter into partnerſhip with the landed gentlemen of Chili, that the cargo of every ſhip generally belongs in part to the maſter; though ſome ſhips are freighted, and if the loading be wheat, greatly augments its value; for the fanega coſts here only ten or twelve rials, or two dollars, and the freight is from twelve rials to two piaſters. Another circumſtance which raiſes the price of wheat at Callao, where it is ſold for twenty-four or thirty rials is, that the fanega is there only five arobas and five pounds, whereas at Chili the fanega is ſix arobas and ſix pounds.

THIS commerce being carried on only in ſummer, that ſeaſon may be termed the fair of Valparaiſo; but on the approach of winter the place becomes as remarkably deſolate, the crowd of traders repairing to Santiago, thoſe only continuing at Valparaiſo, who cannot afford to remove.

VALPARAISO is abundantly ſupplied with proviſions from Santiago, and other places in its neighbourhood; but ſhips do not victual here ſo cheap as at Conception. The fruits cannot be viewed without admiration, both with regard to their beauty and ſize, particularly a ſort of apples called Quillota, being brought from that place; they prodigiouſly exceed the largeſt in Spain, and beſides their exquiſite flavour, are ſo luſcious that they melt in the mouth.

AMONG the ſeveral kinds of game, there is here ſuch a plenty of partridges in their ſeaſon, which begins at March and laſts ſeveral ſucceeding months, that the Santiago muliteers knock them down with ſticks without going out of the road, and bring great numbers of them to Valparaiſo. But few of theſe or any other birds are ſeen near the town. It is the ſame with regard to fiſh*, very little being to be caught either in

* They take their fiſh by ſhooting a barbed arrow into them, which has a long light ſhaft, that ſuffers the fiſh not to ſink after it is wounded. A.

the harbour or along the coaſt, in compariſon of what may be taken in the other parts.

The coaſt of Valparaiſo forms a bay, lying N. E. and S. W. three leagues in length, and having two capes called Concon, and Valparaiſo. In the S. W. part of this bay is the harbour, of a convenient ſize, and running above a league farther up the country. The bottom is a firm tenacious mud. At the diſtance of a cable's length and a half from the ſhore, is from fourteen to ſixteen fathom water, which increaſes in depth proportional to the diſtance, that at the diſtance of half a league there is thirty-ſix or forty fathom. The harbour is every where free from rocks and ſhoals, except to the N. E. of the breach de los Angeles, where, about a cable's length or two from the land is a rock, which muſt be the more carefully avoided, as it never appears above water, but ſometimes has not a depth ſufficient for a ſhip of any burden to paſs over it. The courſe into this harbour is to keep near the point of Valparaiſo, within a quarter of a league from the ſhore, where there is twenty, eighteen, and ſixteen fathom water. After getting round the point you muſt ſtand nearer to the ſhore, in order to avoid a bank which lies thereabouts. Not, that it can be attended with any danger, for the ſide of it is ſo bold, that if the ſhip ſhould touch it little damage could enſue. This bank is always above water, and there is a neceſſity for paſſing ſo near it, in order to keep to windward, as otherwiſe it would be difficult to fetch the harbour. Regard muſt alſo be had to the time proper for entering the port of Valparaiſo; for it is by no means proper to attempt it in the morning, as the wind though blowing freſh without does not then extend ſo far into the bay, and thus the ſhip, by having very little way, and, conſequently not anſwering her helm, might drive upon the bank; and to let go your anchor in fifty fathom water, which is the depth cloſe to the ſand, will be very inconvenient. The common method

thod therefore is, to keep in the offing till about noon, or ſomething after, when the wind uſually continues to the bottom of the harbour; and then by obſerving the abovementioned rules, the ſhip will fall into her ſtation without any difficulty. Or you may run into the bay and there come to an anchor, till the day following, and then weigh early and go in with the land breeze, here called Concon, as blowing from that point; and this breeze may be depended on every day at a certain hour, except during the time of the N. winds, which cauſe ſome alteration in it.

THE ſafeſt method of mooring ſhips is lying one anchor on the ſhore towards the S. S.W. and another in the channel towards the N. N.W. The former muſt be well ſecured, as the reſource againſt the S. and S.W. winds; for though they come over the land, they are often ſo violent, and the ſhore of the harbour ſo ſloping, that the ſhips would otherwiſe drive.

As ſoon as the north winds ſet in, which happens in the months of April and May, the veſſels in the harbour are expoſed to their whole violence, which alſo cauſes a very high ſea. In this exigence, the whole ſecurity of the ſhips depends on the anchor and cable towards the N. N. E. it will therefore be very proper to lay another in the ſame direction; for if it ſhould give way, it would be impoſſible to hinder the ſhip from ſtriking on the rocks near the ſhore. The only favourable circumſtance here is, that the bottom being very firm, and riſing towards the ſhore, the anchor has good hold; and conſequently the whole depends on the ſtrength of the cable.

CHAP.

CHAP. XI.

Voyage from VALPARAISO *to* CALLAO; *ſecond return to* QUITO *to finiſh the Obſervations; third Journey to* LIMA, *in order to return to* SPAIN *by the way of* CAPE HORN.

THE ſervice our ſquadron was employed on being that of cruiſing in thoſe ſeas, in queſt of the enemy as long as it ſhould be thought requiſite, the commodore, without ſtaying any longer than was abſolutely neceſſary, came on board, and we immediately put to ſea, and ſeveral times viſited the iſlands of Juan Fernandes, till the 24th of June, 1743, when we ſhaped our courſe for Callao, which port we entered on the 6th of July. The day following the commodore and principal officers went on ſhore, and were received by Don Joſeph de Llamas, general of the forces in Peru, and government of Callao; who, on account of the firſt employment, reſides at Lima, but was come to Callao to compliment the commodore. He attended him to Lima, and introduced him to the vice-roy, who expreſſed his great ſatisfaction at his ſafe arrival after ſuch long expectations. He was alſo met on the road by the principal perſons of the city.

AFTER taking our departure from the iſland de Tierra de Juan Fernandes, we ſteered the three firſt days N.N.E. and N.E. one quarter northernly, having freſh gales at W. and a heavy ſea from the S.W. When we came into the latitude of 28° 30′ we ſteered N. ſix or ſeven degrees eaſterly, till the third day at nine in the morning, when being in the latitude of 16° 28′, we made the land on the coaſt of Chala; and the day following, being the 4th, the iſland of Sangallan, which at noon bore E. N. E. diſtance ſix leagues. We then coaſted along the ſhore; and on the 5th at noon, we ſaw the iſle of Aſia,

Aſia, bearing E. N. E. ſix leagues diſtant; and on the 6th as before-mentioned, the ſquadron came to an anchor at half an hour after one in the afternoon, in Callao harbour.

HENCE it appears, that till we were in the latitude of 28° 30′, the wind was at S. W. which agrees with my obſervations, mentioned Chap. III. relating to this ſea; and if no other circumſtance concurred to verify them, it muſt be imputed to the ſeaſon of the year, it being the beginning of winter when we returned to Callao. But as during the firſt three days, the ſtrength of the wind had driven us near the coaſt; ſo from the latitude we found it farther to the ſouth; between 25 and 21, began to incline towards the S. E. and from the latitude of 20°, when we found ourſelves near the land, till our arrival at Callao, we had the wind S. S. E. and E. S. E. It was the ſame with regard to the ſea coming from the S. W. for it gradually diminiſhed as we approached the coaſt: ſo that from 25° it was not at all troubleſome, and after we were paſſed 21° became imperceptible. But it was very different with regard to the current, which from the parallel of 20 or 21°, we perceived to ſet towards the N. W. parallel to the direction of the coaſt, and became much more ſenſible after we had ſight of the land, its velocity increaſing, as latitude decreaſed.

I WOULD recommend two precautions to be uſed in the voyage from Chili to Callao. The firſt is not to make the land in the bay of Arica, the many eddies of the current there rendering it very difficult to get again clear of the coaſt; which muſt be done by keeping along ſhore; as by ſtanding out to ſea, you will be in danger of not reaching the harbour: for the current ſetting N. W. on ſtanding in for the land, you will probably find yourſelf to leeward of the harbour; in which caſe it will be far from eaſy to work up againſt the wind and ſtrong current. The ſecond flows

from the former, and is to make the land ſomewhere between Naſca and Sangallan, as the coaſt may be then kept at a proper diſtance, and the danger of falling to leeward of the port avoided: a misfortune which has happened to many, who have been carried farther out than they expected; ſo that after a long look out for land, they find themſelves on its firſt appearance to leeward of their port.

In winter, eſpecially, too much care cannot be taken, as from the continual thickneſs of the atmoſphere, obſervations cannot be made ſo often as requiſite; ſometimes not for five or ſix days ſucceſſively; at the ſame time the ſight of land is entirely intercepted by the denſity of the fog. This we experienced; for after we were anchored in Callao at only a quarter of a league diſtant from the land, the people on the ſhore had no ſight of the ſhips: and it was owing to our being very near the coaſt that we made the harbour; for had we been at a diſtance, we ſhould have been far to leeward, when the weather cleared up.

On the 25th of June, being the ſecond day after our departure from the iſland de Tierra de Juan Fernandes, we ſaw a meteor like that we had before ſeen at Quito, namely, a globe of fire, or large globe of inflammable exhalations. It firſt appeared in the weſt, at half an hour after three in the morning, and moved with great velocity for a conſiderable ſpace towards the eaſt, as if carried by the wind. The light of this meteor was ſuch, that the watch on the quarter-deck could plainly diſtinguiſh every perſon on the fore-caſtle; and both were not a little terrified. The phænomenon laſted between three and four minutes, and half an hour after we felt two violent ſhocks, at an interval of about a minute and a half betwixt them, ſo that all apprehended the ſhip had ſtruck on ſome ſhoal; but, on reflection, we concluded it to be the effect of an earthquake.

The

THE ſquadron being ſafely arrived at Callao, with the commander in chief of the South-ſea, a title given to Don Joſeph Pizarro, and a ſufficient number of officers of ſuch diſtinguiſhed zeal and experience, that they might well ſupply our place without detriment to the ſervice; and, at the ſame time, we being willing to put the finiſhing hand to our principal work, we aſked the vice-roy's leave to return to Quito; but his excellency was deſirous that we ſhould firſt complete ſome particulars he had committed to our care. Accordingly we applied ourſelves aſſiduouſly to our work; and Don George Juan, having finiſhed his part firſt, left Callao on the 14th of November, propoſing to make all the neceſſary preparatives againſt my arrival, that the proper obſervations might be made without delay. On the 27th of January, 1744, I reached Quito, where I found Don George Juan had, by his extraordinary care, nearly finiſhed every thing neceſſary for the continuation of our work; and whilſt the remainder was performing, we had an opportunity, in conjunction with Mr. Godin, the only French academician now remaining in this province, of obſerving the comet which appeared this year.

THOUGH the comet might have been ſeen on the 2d and 3d of February, the atmoſphere of Quito being ſo unfavourable to aſtronomical obſervations on account of the clouds, it was the 6th before we could obſerve it. The comet was then near the weſtern part of the horizon, and being behind the mountain of Pichinca, its altitude concealed it from our ſight, ſo that we could not obſerve it after ſeven or eight at night. On the 6th, at ſeven in the evening, we found its altitude above the horizon to be 15 degrees, and its azimuth from the N. 72 degrees; Mr. Godin and Don George Juan judged its nucleus to be oblong, to me it appeared perfectly circular; but we all agreed that it was larger than Jupiter. The tail, which we diſcerned through ſome light clouds, ſeemed to extend two de-

grees, and to form with the vertical circle, an angle of near thirty degrees.

On the 7th, at eight minutes after seven in the evening, on repeating our observations, we found its altitude to be 11°, 11′, and its azimuth from the north 72°, 45′. From this second observation, which we considered as more accurate than the former, having made proper allowances for refraction, we concluded that the right ascension of the comet was 302°, 50′, and that its northern declination was 20°, 5′. Whence we inferred, that its trajectory was the same with that observed in 1681 by Cassini, and by Tycho Brahe in 157-, and that, in all probability, it was the same; for though the periods do not agree, it might have appeared twice in the first interval. After this we were hindered from prosecuting our observations by the cloudiness of the nights: and some days afterwards we were assured by several, that they had seen it in the morning.

As all the triangles on the north side from Pambamarca, to the place where Mr. Godin had made his second astronomical observations were not completed, and the instrument constructed for that purpose kept in readiness, we made that our first task; Mr. Godin not having then gone through them all. After finishing every thing here, we repaired on the 22d of March to the observatory de Pueblo Viejo de Mira, where meeting with the same difficulties from the thickness of the atmosphere, as we had before experienced during the whole course of our operations, we were obliged to continue there till the 22d of May, when being satisfied with the accuracy of the observations made during this long interval, we returned to Quito, with the pleasing expectation, that our perseverance against the constant difficulties we met with from the clouds was at last come to a period; and that we should now rest from the toils and hardships of living on frozen deserts; a repose the more pleasing,

pleasing, as it was accompanied with a consciousness that no inconveniences had occasioned us to omit the least part of our duty.

DURING our stay at Mira, Don George Juan applied himself to observe the variation of the magnetic needle, and by four observations nearly coincident, he concluded to be nearly 8°, 47′, easterly.

WE now began to deliberate on our return upon the favourable opportunity of the above-mentioned French ships, which were preparing to sail for Spain; as we should then pass round Cape Horn, and not only complete from our own experience, an account of the South-sea, but be enabled to make observations on the whole course. Another, and indeed our principal motive was, the safety of our papers, concluding there could be no danger in a neutral ship, as we then imagined those to be. The concurrence of so many advantages immediately determined us; and leaving Quito we set out for Lima, where I arrived first, Don George Juan having some days been detained at Guayaquil by a fresh commission by the vice-roy. These ships, not sailing so soon as expected, I employed the interval in drawing up an extract of all interesting observations and remarks, and presented it to the vice-roy, who was pleased to order the papers to be preserved in the secretary's office, that if any misfortune should happen to us in the voyage, our sovereign might not be totally disappointed in his generous views of promoting the useful sciences of geography and navigation.

WHILE we were employed in finishing our observations at Mira, the university of Lima gave a remarkable testimony of their sense of Mr. Godin's eminent talents, by chusing him professor of mathematics, in the room of Don Pedro de Peralta, deceased; which he accepted of with the greater satisfaction, as some indispensable affairs of his company would not permit him to gratify his desires of return-

ing to Europe. Accordingly he propoſed to ſpend this interval in making freſh obſervations and experiments, concluding that the atmoſphere of Lima, during the ſummer ſeaſon, would be more favourable to his deſigns than that of Quito or the mountains. On his arrival at that city, the vice-roy, who was no ſtranger to his great abilities, and pleaſed with the prudent choice of the univerſity, conferred on him, at the ſame time of his being inveſted with the profeſſorſhip, the poſt of coſmographer to his majeſty; with other advantages annexed to it. But this gentleman was far from propoſing to make any longer ſtay there than what theſe affairs required; no advantages or honours being ſufficient to make him forget the obligations he was under of giving an account of his voyage and obſervations to his ſovereign and the academy, eſpecially as being the eldeſt of the three academicians; ſo that all the teſtimonies of eſteem could not ſuppreſs his uneaſineſs at the delay.

M. de Juſſieu, though with the ſame regret as the former, determined to continue ſome time at Quito, with M. Hugot, till he ſaw what turn the war would take, that he might eſcape, in his return to Europe, thoſe dangers then ſo common at ſea. M. Verguin choſe to go by the way of Panama: and the others, except the two who died in the country, one at Cayambe and Cuença, were diſperſed; one ſettling in Quito. Thus, the whole French company ſeparated: and it muſt be conſidered as a ſingular happineſs, that after ſuch a ſcene of labours, hardſhips, and dangers, in ſuch a variety of climates, and amidſt ſuch inhoſpitable deſarts and precipices, our operations were accurately performed: and we capable of entering on a new ſcene of dangers and difficulties, which it was our fortune to experience before we were in a condition of preſenting this work to the publick.

BOOK

BOOK IX.

Voyage from CALLAO *to* EUROPE; *with an Account of the Voyage from* CONCEPTION *in* CHILI *to the Island of* FERNANDO DE NORONA, CAPE BRETON, NEWFOUNDLAND, *and* PORTSMOUTH *in* ENGLAND: *and from the same Harbour in the South sea to* CAPE FRANCOIS *in* ST. DOMINGO, *and from thence to* BREST *in* FRANCE.

CHAP. I.

Departure from CALLAO. *Arrival at the Bay of* CONCEPTION. *Voyage from thence to* FERNANDO DE NORONA.

HAVING, as I have already observed, determined on the voyage for returning to Spain; on our arrival at Lima, in the year 1744, we were informed that two of the French frigates, Notre Dame de la Delivrance and the Lys, lay at Callao, and were soon to sail. Such a favourable opportunity was not to be missed, and accordingly Don George Juan and myself agreed for our passage, and also to make the voyage in separate ships, that one at least might escape the dangers to be apprehended in so long a voyage; there being thus the greater probability that one might reach his country, and there give an account of our proceedings with regard to the commission with which we had been honoured.

THE vice-roy had given us leave to return with the greatest marks of esteem; and the ships being ready we embarked on the 22d of October; and the same

day put to sea, steering our course for Chili. The two frigates kept company till the 11th of November, when they separated in the latitude of 33°, 40′, the Lys being obliged to touch at Valparaiso, whilst the Delivrance continued her course for Conception-bay; where she came to an anchor on the 21st of November. This voyage was remarkably short, being performed in twenty-nine natural days. What greatly contributed to this expedition was, that having put to sea at the end of winter, we fell in with some breezes at N. which carried us to the southward, and saved us the trouble of standing so far out to sea, as must be done when the summer is advanced.

In this bay we found the Louis Erasme frigate, which had waited there some time, in order to sail in company with us; and on the 6th of January, 1745, we were joined by the Lys, accompanied with another French ship, called la Marquis d'Antin, which having come hither as a register ship, had taken in a loading of cacao at Guayaquil, and was in her return to Europe. The season being far advanced, our little squadron put to sea the first fair wind, which happened on the 27th of January, when about ten in the morning we all got under sail, steering W. and W. one quarter northerly, according as the winds would permit, which were continually varying from S. W. to S. S. E. On the 4th of February we found ourselves in the latitude of 35°, 21′, and 9°, 38′, west of the meridian of Conception; when the wind blowing fresh at S.W. by W. we tacked in order to stand to the southward. The next day we were informed that a very dangerous leak had been discovered in the head of the Lys, and that it was so far under water as not to be stopped without going into some harbour and lightening the ship; which had determined the captain to run into some of the harbours of Chili in order to stop the leak; accordingly he left the rest of the fleet the same day. The Delivrance, on board of which I embarked,

was

was in little better condition, making daily a great deal of water ever ſince our departure from Conception. But the captain, unwilling to loſe the benefit of ſailing in company, and, at the ſame time, fearful that his men would leave the ſhip, determined to keep the ſea. He alſo apprehended, that as the ſhip's hull was very old, and greatly ſhattered by her late voyage, on being ſearched, the neceſſary repairs would require a conſiderable time; and thence, beſides the coſts, he would find it difficult to get round the cape that year. Theſe conſiderations determined him to continue his voyage, without acquainting the other ſhips of the bad condition of his veſſel. But this prudence had nearly proved fatal to all on board, as the defects were greatly increaſed during the courſe of the voyage.

TILL the 6th the winds were variable, ſometimes freſh, then dying away; the ſea proportionable, running high in a freſh gale, and abating with the wind.

FROM the latitude of 35°, 21′, we ſteered between the S. E. and S. and on the 12th, being in the latitude of 41°, 20′, we were obliged again to ſteer between S. W. and W. till the eighteenth; when we found ourſelves in the latitude of 45°, 20′. The winds were firſt at W. afterwards N. N. E. from which they changed to the E. N. E. and N. E. and varying continually, at laſt ſhifted to the S. E. S. and E. During this interval, every change of the winds was attended with calms and violent ſhowers; and at other times the ſea was covered with fogs, or the atmoſphere ſo clouded with vapours as to intercept the rays of the ſun.

FROM the time we left Conception till the 7th of February, being then in 36°, 12′, and 9°, 20′, weſt of the meridian of Conception, we always ſaw that kind of birds called Pardelas, but here they left us. On the 11th, in the latitude of 40°, 45′, and ſomething more to the weſtward than on the 7th, we ſaw

a number of ſmall black birds, flying ſingly, and againſt the current of the water. On the 15th, the weather being fair, but the wind blowing freſh at W. S. W. we ſaw a Quebrantahueſſos, or oſſifrage; and on the 16th, being in the latitude of 44°, 31′, and 11°, 24′, weſt of the meridian of Conception, we ſaw ſeveral flights of Curlews and Pardelas; and the Quebrantahueſſos kept continually in ſight of the ſhip: ſoon after the wind came about to the S. W. and blew ſo ſtrong, that the frigates were obliged to hand all their ſails except their courſes. On the 18th the wind abated, the ſea, which ran exceeding high, became tolerably ſmooth, and the Quebrantahueſſos diſappeared at the beginning of this welcome change of weather.

From the 18th to the 26th our courſe was eaſt, one quarter ſoutherly, and S. E. one quarter eaſterly; the winds being variable between the S. S. W. and W. S. W. with ſome ſhort tranſitions to N. W. From the 26th to the 3d of March we ſteered E. S. E. and E. with the ſame winds, but ſo very variable, that from W. they ſhifted to the S. W. and from thence flew about to the E. ſo that in this interval they blew from every point of the compaſs, but rarely continued a ſingle day in one direction. Sometimes for three or four hours we had a freſh gale, this ſoon died away, and was often ſucceeded by calms, being regular only in inconſtancy.

On the 20th of February we had a ſtrong gale of wind at W. S. W. which obliged us to double reef our topſails. We were then in 48°, 2′, latitude. On the 21ſt the wind abated, and continued ſo all the morning with an eaſy ſea. At noon the wind freſhened, and a ſtorm came on at W. N. W. W. and W. S. W. that we could carry only our reefed courſes. The ſtorm continued till the 23d about ſun-ſet, when we let out the reefs in our courſes, and ſet our topſails, after reefing them. During the whole time we had

had a very hollow ſea, and at the ſame time the atmoſphere ſo hazy, that ſometimes we loſt ſight of the other ſhips. This fog precipitated itſelf in a mizzling rain, which continued inceſſantly two days after the ſtorm was over.

ON the 20th we were amuſed with the ſight of a great number of birds of all ſizes, and among them one larger than a gooſe, and entirely black. On the 21ſt their numbers increaſed, ſome of which were larger than the Quebrantahueſſos, but ſeemed to be of the ſame ſpecies. All the feathers of this bird were white, except thoſe on the upper part of its wings, which were brown. Its wings were long, ſlender, and ſomething curved. On the 22d, when we were in the latitude of 51°, 2′, and 9°, 35′ weſt of the meridian of Conception, they continued with us in the ſame numbers. On the 23d they increaſed, and among them were ſeveral gulls. The feathers on the bodies of the latter were white, their tails ſhort and broad, their necks large but well proportioned, and their heads and beaks anſwerable: on the upper parts of their wings the feathers were black, and white underneath; the wings very diſproportionate in length, and conſiderably crooked at the middle articulation. This bird flies very ſwift, ſometimes juſt above the ſurface of the water, then mounts into the air; and after taking two or three gyrations, they again dart down near the water's edge. On the 25th, the weather being foggy, with a mizzling rain, in the latitude 55°, 6′, and 6°, 42′, weſt of the meridian of Conception, we ſaw great numbers of birds, and among them the Quebrantahueſſos of both the kinds already mentioned, and on the 26th ſeveral Toninas, a kind of wild ducks.

ON the 27th we had little or no wind, with ſnow and hail. The birds ſhewed themſelves in greater numbers and variety than before; but the moſt numerous were gulls, like thoſe already deſcribed, but the colours ſomething different; ſome being of an aſh colour;

colour; others had their whole bodies white, and their wings black, and others the reverſe. Some, though very few, were entirely black, without the leaſt ſpot of white. We alſo ſaw among them the Toninas, with their white bellies and brown backs.

On the 1ſt of March, being in the latitude of 57°, 50′, and 0°, 3′ eaſt of the meridian of Conception, we ſaw ſome whales, but the number of birds were conſiderably diminiſhed: the ſnow and hail ſtill continued; the denſe clouds, which were continually forming in that part of the horizon whence the winds blow, precipitating themſelves in theſe meteors; and though the winds were moderate, the clouds were conſtantly gathering. On the 3d we had thick weather; the cold became extreme, and a great deal of ſnow fell. The birds, alſo, returned in their former numbers; principally of the larger ſort.

On the ſame day, at noon, in the latitude of 58° 40′, and 4° 13′ E. of the meridian of Conception, a little W. of the meridian of Cape Horn, and 60 leagues to the ſouthward of it; we altered our courſe, ſteering E. N E. and continued ſailing between that and the N. E. till the 28th of the ſame month. But the winds were ſo variable and unſettled, that there was ſcarce a day in which they did not blow from two different quarters, and ſometimes from points almoſt oppoſite.

On the 4th we had fair weather, with the wind at N. N. E. and W. on the 5th at S. E. and W. on the 6th S. and S. W. changing round the whole compaſs, and ſcarce ever continuing a day in one point, till the 8th, when we found ourſelves in the latitude of 55° 16′ and 14° 30′ E. of the meridian of Conception, having weathered both Cape Horn, and Staten Land. It ſnowed and hailed continually, ſo that it was ſix inches deep on the deck: but now it began to diminiſh, and with it the cold. The birds likewiſe no longer appeared in ſuch vaſt flocks:

and

and on the ſeventh we ſaw a new ſpecies of a dark brown colour, greatly reſembling geeſe, and, like them, keep ſwimming on the water for a long time. On the 8th we ſaw birds of a brown and white colour, in ſmall flocks, of ten or fifteen in each. Theſe alſo ſwam on the water, and when flying, kept always near the ſurface. On the 9th being in the latitude of 54° 21′ and 16° 10′ E. of the meridian of Conception, beſides the ſame flocks of birds, we alſo ſaw Pardelas, but of a leſs ſize than thoſe in the South-Sea. On the 10th in the latitude of 54° 1′ and 17° 38′ E. of Conception, the winds were very variable between the N. N. E. and S. W. with ſo thick a fog, that the ſhips fired guns to avoid running foul of one another; for each had kept two guns mounted for making ſignals. We had alſo heavy ſhowers, and in the evening ſaw flocks of birds, moſt of them of middling ſize, with dark brown feathers, and ſlender crooked wings. The whole difference between them conſiſted in the ſize, their form and colour being perfectly alike; and though we ſaw them during the whole day, they were in the greateſt numbers from four to ſix in the evening. On the 11th being in the latitude of 52° 15′, and 18° 9′ E. of Conception, we obſerved that the colour of the water was changed, it being now greeniſh; but another day's ſailing brought us into water of its uſual colour. On the 12th and 13th the wind blew freſh at N. W. and W. accompanied with heavy ſhowers but of no long continuance, nor attended with any bad conſequences. Among the birds ſeen theſe two days, and which were more numerous than before, two ſpecies in particular engaged my attention; one large, reſembling vultures, with black wings, and their bodies of a light brown ſpotted with white: the other, though little different in colour from the former, did not exceed the Pardelas in ſize: both ſorts kept near the ſhip; and our men told us they

they had ſeen a ſhoal of fiſh, which had probably drawn ſuch numbers together.

On the 14th the wind variable betwixt the W. N. W. and S. W. and our latitude 48° 12′, we began to be ſenſible of an agreeable change in the temperature of the air; in the day time it was not cold upon deck, and at night the cabins were warm. On the 15th we had a freſh gale at W. N. W. and N. W. with a hollow ſea, which continued the two following days being the 16th and 17th, the weather was very hazy, ſudden ſhowers frequent, and the ſame number of birds ſtill continued. On the 16th the marquis d' Antin came along ſide and told us, that the ſhip had ſprung a leak, and that they had laboured the whole night to ſtop it, having, after a long ſearch, found it to proceed from a hole made by the rats in one of her quarters near the water's edge. This obliged them to heel the ſhip in order to ſtop it, and the other two ſlackened ſail that ſhe might come up with them. On the 17th we ſaw many large whales, ſeveral of which played round the ſhip for a conſiderable time.

The wind during the laſt day was at S. E. and at S. S. E. but moderate; the ſea ſmooth, with ſhowers of rain; when we found ourſelves in the latitude of 44° 30′ and 25° 13′ E. of Conception, and ſaw ſeveral flights of birds both of the large and ſmall ſpecies, but different in colour from any we had ſeen before, being entirely white.

The water now increaſed ſo prodigiouſly in our ſhip, that for ſome days our men had been almoſt continually labouring at the pump, which quite exhauſted their ſpirits; and all of us under the greateſt apprehenſions of periſhing. Nor was this a ſudden panic, the water ſometimes increaſing ſo ſuddenly, that notwithſtanding all our efforts it ſeemed to gain upon us. We obſerved that the principal leaks were at the head and ſtern, and the 19th proving a fine day, we

we hoiſted out our boat, for the carpenters to nail ſheet lead over the ſeams; but the ſea ran too high for them to execute it.

ON the 20th the wind blowing ſtrong at N. and N. E. one quarter northerly, and the ſea running high, we laid to, under our mainſail; but rain coming on, we had, next day, moderate weather. The wind continued in the ſame quarter till the 25th, but little of it, with fogs and ſhowers. We were now in the latitude of 39° 14′ and 30° 5′ E. of the meridian of Conception. During theſe days we ſaw ſeveral birds, but in much leſs numbers than before; ſome of them very different, as black Pardelas, and others of the ſame colour, but of an unknown ſpecies.

THE water in our ſhips was now ſo greatly increaſed, and our men ſo ſpent with continually labouring at the pump, that we had thoughts of quitting her; and doubtleſs this would have been done ſome days before had it not been for her valuable cargo; having on board near two millions of Peruvian dollars, a million and a half of which was in gold and ſilver, and ſtowed under the cacao ſhe had taken in at Guayaquil. In order therefore in ſome meaſure to keep out the water, a ſail quilted with oakum, and ſhot faſtened to the clues to ſink it, was lowered into the water from the head of the ſhip; but this expedient had little effect. For though at firſt the water did not ſeem to enter with the rapidity as before, yet the oakum which prevented it, was ſoon carried away, when our condition was not mended in the leaſt.

FROM the 29th, when we were in the latitude of 35° 38′ and 33° 27′ E. of the meridian of Conception, our courſe was W. N. W. till the 4th of April, when till the 20th we ſteered between the N. E. and E. N. E. with the ſame variable weather, ſhowers, hard gales, and calms. So that during this long interval of twenty-nine days, our latitude diminiſhed little more

more than nine degrees and a half, finding ourſelves in the latitude of 25° 55 ; and between the twenty-eighth and twenty-ninth degrees we were detained from the 7th to the 15th without being able to make better way. On the 29th of March we ſaw Pardelas and the other kind of black birds. On the 30th we took down our weather boards, and got our top-gallant-maſts up. During this time the birds ſeemed to have entirely forſaken us; but on the 3d of April, we ſaw great numbers; and on the 5th and 6th we ſaw a new ſpecies, reſembling a lark in ſhape and ſize. Here we had alſo a firſt ſight of the Dorados; but from hence we never miſſed ſeeing that fiſh and alſo the Bonito. On the 8th, in the latitude of 28° 58′, we began to meet with very thick fogs, violent and frequent ſqualls of wind and rain, which continued with little or no intermiſſion to the 13th, but that day proving fair, we made uſe of it in getting up and mounting our guns. The carpenters and caulkers were ordered into the boat, to endeavour to ſtop the leaks at the water's edge; for though they had nailed ſheet lead over the ſeams it did not anſwer the purpoſe, the water nearly iſſuing with the ſame rapidity. On the 18th, being in the latitude of 26° 52′, we firſt ſaw the flying-fiſh, and Taburones, but afterwards we had continual ſight of them, their numbers increaſing in proportion as we leſſened our latitude.

In the latitude of 39° 14′ on the 25th of March, Don Pedro de Arriago, freighter both of the Louis Eraſme, and la Delivrance, made an offer to the captains, that if they thought it neceſſary, proviſions and water growing ſcarce, they might put into the harbour of Monte Video, where they might not only refit the ſhips, and provide them with all neceſſaries, but alſo take the benefit of a convoy, the Aſia man of war being to ſail for Spain about that time, with commodore Don Joſeph Pizarro;

adding, that it was the more adviſeable to embrace this opportunity, advice having been received from Europe, three or four days before their departure from Conception, that France and England were at war. But the captains from ſelfiſh motives rejected this ſalutary propoſal, though at the ſame time they muſt be ſenſible that the want of water and proviſions, together with the bad condition of our frigate, would unavoidably oblige them to put into ſome harbour. And this, in oppoſition to the worthy merchant's advice, they determined ſhould be the deſart iſland of Fernando de Norona; for though the Portugueſe of Braſil had ſome time ſince ſent a colony thither, it was abandoned on account of its ſterility. The French India Company alſo had for ſome time a ſettlement there, but were obliged, on the ſame account, to leave it; and during the time of that ſettlement, the captain of the marquis d'Antin had been there, and thence knew that it abounded with water and wood, the two articles moſtly wanted. Don Pedro Arriago adhered to his firſt propoſal, and it had doubtleſs been complied with by the two frigates freighted by him, had not the marquis d'Antin been in company, the captain of which made uſe of ſuch plauſible reaſons in ſupport of his opinion, that it prevailed, and we accordingly ſteered for the harbour of Fernando de Norona.

FROM the 20th to the 26th of April, we had calms and ſqualls, and from thence to the 8th of May, when we found ourſelves in the latitude of 16 deg. 58 min. we had little wind, and variable between the N. and E. but moſtly at N. E. nearly. On the 8th the wind began to freſhen, and though for ſeveral days it was at E. and E. N. E. we had it generally at E. S. E. till our arrival at Fernando de Norona. Our courſe from the 20th of April, was as the winds would permit, ſometimes N. N. W. N. W. one quarter northerly, and W. N. W. but from the 7th of

May, when the wind ſettled to the eaſtward, we ſteered N. and N. one quarter eaſterly to the 15th, when finding ourſelves in the latitude of 4 deg. S. being nearly the ſame with that of Fernando de Norona, we ſtood directly W. and having ſight of it at half an hour after nine in the morning of the 21ſt of May, all the frigates at half an hour after three in the evening, came to an anchor in the road, to our no ſmall joy. This voyage had continued an hundred and fifty days, and been attended with great fatigue and anxiety, on account of the bad condition of our frigate. For more than once we had the greateſt reaſon to apprehend ſhe would founder before we had time to provide for our ſafety.

From the 6th of April, we ſaw no birds till the ſecond of May, when being in the latitude of 20° 18′, we ſaw an Rabiahorcado, which the French call Tailleur, the taylor, from the form and motion of its tail. This bird is about the ſize of a wood pigeon, with a ſhort neck, a proportionate bill, and its wings very long, broad, and curved. The tail ſeemed to be compoſed of very few feathers, and theſe dividing at the root, ſo as to repreſent a pair of ſciſſars opened; but when it is on the wing, it ſhuts and opens them at pleaſure, repreſenting the manner of uſing that inſtrument. The two blades, of which the tail conſiſts, are very long in proportion to the body of the bird; and together with the whole plumage are of a fine gloſſy black, except the breaſt, which is a ſort of very pale aſh colour. It flies very ſwiftly, and generally high, never being ſeen low, but when hovering about a ſhip, as if intending to ſettle on it.

On the 4th of May we ſaw a Pardela as large as a wood pigeon; the feathers on its belly, breaſt, and under the wings, were an aſh colour; and thoſe on the neck, head, and upper part of the wings, of a dark brown. From this day, when in the latitude of 19° 40′, till the twelfth, when we came into ten degrees, we conſtantly

ſtantly ſaw ſome though few of the two laſt mentioned kinds of birds; but from that time we had no more ſight of them till the evening of the 16th, when in the latitude of 4° 30′, nearly, we ſaw a different kind larger than the Pardelas; but from the ſlow motion of its wings we concluded it to be a land bird. It was at too great a diſtance for us clearly to diſtinguiſh its colours and form. We were, however, notwithſtanding this ſignal, under a neceſſity of ſteering W. when after a run of 102 leagues we made the iſland. The following days we never failed of ſeeing a few of the ſame ſpecies; but on the 19th their numbers increaſed. They were wholly black, except a few brown feathers on the wings. Among theſe birds we obſerved one larger than the reſt, with a long neck, a prominent body, and its whole plumage of a dark brown: it moved its wings ſlowly, and every way reſembled a cormorant. We ſaw him ſeveral times dart down with great rapidity to catch fiſh; and on the 29th in the morning we were entertained with the ſight of great numbers of them, whom hunger rendered very alert in the ſame exerciſe. From the time of ſeeing the firſt, till we were directly S. of the iſland, we ſailed 33 leagues, the greateſt diſtance theſe birds are known to venture out to ſea. On the 20th in the evening, being betwixt ten and eleven leagues from the iſland, we ſaw ſeveral birds reſembling the Guanaes already deſcribed; and at ſunſet great flocks of them were flying towards the W. whence we concluded that we were not far from the iſland. Theſe birds, which the French call Fou, and the Engliſh Booby, are about the ſize of a gooſe, have a large and curved wing, all over of a dark brown, and in flying uſe a great deal of motion with their wings; but when they attempt to catch a fiſh, they dive with the ſame rapidity as the Guanaes.

ABOUT two hours before we made the iſland, we ſaw ſeveral Rabijuncos, a bird, which by always keeping near the ſhore, indicates its proximity. They are

about the ſize of a wood pigeon, with a ſhort thick neck, a ſmall head, the whole plumage white, and a long tail in the form of a rabijunco or ruſh, half an inch diameter near the body, tapering its whole length till it terminates in a point, whence it was called Rabijuncos. Theſe birds are never ſeen above eight or ten leagues from the ſhore.

From the time we firſt ſaw the Dorado and Bonito, the laſt increaſed in numbers as our latitude diminiſhed. We now alſo ſaw the Tunny, and a great many flying fiſh. We caught ſome of all kinds; and here it is not unworthy notice, that the Bonitos and Tunny-fiſh bite only from day-break till about ſeven in the morning, and again in the evening from ſun-ſet till dark.

CHAP. II.

Nautical Obſervations and Remarks on the Voyage round Cape Horn.

FROM the time of our ſteering weſt, being in the latitude of the iſland, till we were under its meridian, we ſailed 5 deg. 4 min. and a half, though all on board, who had kept an account of the ſhip's way, imagined we were to the weſtward of it; but the variation of the needle convinced us, that our reckoning was not to be depended on, and that the ſhip was much farther to the eaſtward than we imagined; an error owing principally to the motion of the currents, which had drawn us at ſuch a great diſtance from the land; all the French pilots on board the Delivrance agreed in this particular; and ſome related, that when they thought themſelves near the land, they had often found the ſhip above three hundred leagues to the eaſtward of their reckoning. I did not, however, make any correction in my journal on this account; for which

which I had two reaſons. The firſt, that I might be able to judge of the diſtance the currents had carried us to the eaſtward. The ſecond, was an unwillingneſs to commit a freſh error by making an uncertain correction, as I was not ſatisfied that there were any currents, and conſequently unable to gueſs at their velocity; ſome affirming they had found them very violent; and others as poſitively aſſerting, that they had never met with any. This was the caſe of the three frigates when they entered the South-Sea: and the captain of the Delivrance informed me, that without attending to the currents in going round the Cape, in the latitude of 62 degrees, his reckoning perfectly agreed with the time of making land; and that ſeveral Frenchmen had done the like: but, on the other hand, it has happened to ſome, that when they imagined themſelves in the South-Sea by the place of the ſhip according to their reckoning, ſteered N. E. till from the diſappointment of not falling in with the land, at the time expected, had convinced them that they had not weathered the Cape; and accordingly ſteering towards the W. they have found their ſuſpicions confirmed by making the coaſt of Braſil, or Buenos Ayres.

ON the 21ſt of May, at one in the afternoon, we were under the Meridian of Fernando de Norona, and at above three quarters of a league diſtant to the northward of it. Whereas, according to my computation, the frigate was only 29° 56′ E. of the meridian of Conception; but by the modern French map, laid down from the obſervations ſent to the academy of ſciences, in which the longitudes of all places are marked with all the accuracy which diſtinguiſhes the works of that learned body, this iſland lies no leſs than 42°, 32, 30″, E. of the meridian of Conception; conſequently the difference between my reckoning, and the true longitude of the iſland, being 12°, 36′, 30″, is the diſtance which the currents carried our frigate to the eaſtward, excluſive of her lee-way.

On the 15th of May, namely, before he began to ſteer W. we ſpoke with the Marquis d'Antin, and he captain gave us to underſtand, that according to his reckoning, the ſhip was then 45°, 3′, E. of the meridian of Conception. Whereas the diſtance, according to my account was only 34°, 19′. Thus the ſhip, according to his computation, was 10°, 44′, further to the eaſtward than by mine, and the difference on the ſhip's arrival at the iſland, will be 2°, the diſtance the currents had carried him to the eaſtward beyond what he had judged. The captain of the Deliverance, on the ſame day, made the ſhip 39°, 15′, eaſt of the meridian of Conception; that is 4°, 56′, more than I; and conſequently on reaching the iſland, his account was 7°, 40′, further to the weſtward than the ſhip. Others, who kept a journal on board the Delivrance, differed as much; ſome nearly agreeing with me, namely, thoſe who had made no allowance for the currents; whilſt others approached nearer to the account of the captain of the Marquis d'Antin, having uſed an equation in reſpect to the currents. But every one, at making the iſland, found their reckoning erroneous; the ſhip, according to their accounts, being farther to the weſtward than ſhe really was; but differed in the quantity of that error, according to the different allowances they had made for the ſetting of the currents.

The difference betwixt my account and that of the captain of the Marquis d'Antin, who was one of thoſe who made the ſhip fartheſt to the eaſtward, proceeded from the captain's knowing by obſerving the variation of the needle, that the frigates made more way than the reckoning allowed of, and therefore concluded that a correction was neceſſary, which he performed by adding a proper diſtance, from the journals of others, and thence inferred that the velocity of the currents was conſiderable; but as that really exceeded the allowance he made for it, his ſhip was always to the

the eaſtward of his reckoning. The captain of the Louis Eraſme found the difference nearly the ſame as the captain of the Marquis d'Antin, who made uſe of an equation. Both, as I have already obſerved, founded their corrections on the variations; differing very conſiderably from that delineated on the charts.

THE great variety of currents met with in ſailing round Cape Horn, being ſometimes ſtrong, ſometimes moderate, and at others ſcarce perceivable, induces me to think that they were not conſiderable in correcting the account. For their velocity being uncertain, it is in fact only committing a voluntary error; and as the variations enable us to gueſs at our longitude within two or three degrees; and as after making uſe of the equation, the place of the ſhip cannot be known nearer the truth, the correction is entirely uſeleſs; and the inference drawn from obſerving the variation, is abundantly ſufficient for ſecurity. I ſay, that the place of the ſhip may be known ſo within two or three degrees; and a more exact conformity between the corrected reckoning and the time of making land would be rather fortuitous than the effect of accuracy, in making the correction. The difference of one or two degrees in the variations, an error unavoidable, may produce in the longitude an error of three or four degrees, or even more, according to the place of the ſhip. Every one on board the three frigates, found their reckoning to the weſtward of the ſhip's true place, though they had made an allowance for the currents, and the difference between ſome of their accounts was not ſmall, as I have already noticed *. This was owing to the like uncertainty in the journals of other

* There is a ſtrong current to the W. in theſe ſeas, and by the beſt obſervations I could make (at a mean) it is about one mile per hour, but in ſome places much more, eſpecially near the mouth of the river Amazon.

N. B. I generally found the above allowance to anſwer from lat. 4 S. to 54 S. A.

voyages they had with them; for the currents being ſtronger at ſome times than others, they who followed the former made a much larger allowance than thoſe who regulated their corrections by the latter; and conſequently their reckonings muſt have been very different. The currents therefore being uncertain, and the journals of thoſe voyages very variable with regard to their velocity, there is no more ſecurity in following one than another, and even if we take a medium between them, there would be no more ſafety in relying upon it, than blindly to follow that which was thought the beſt. However, their utility and even importance cannot be denied, as they inform the navigator of the parts where he muſt expect to meet with currents, and at the ſame time warn him of their variety.

One cauſe of the little knowledge we have of theſe currents is, that this voyage is ſeldom made, and leſs by the Spaniards than by any other maritime nation; and though ſince the year 1716 ſeveral French ſhips have ſailed into thoſe ſeas, they have not yet been able to remove this difficulty, and ſettle the times of the ſeveral degrees of velocity of the currents in the different latitudes paſſed through in weathering the Cape. This is indeed only to be expected from long experience and repeated voyages; and in order to this navigators ſhould not make any allowance for their currents in correcting their days works; for the diſtance between the knots on the log-line being truly adjuſted as ours was, at forty-ſeven Paris feet and one third, and the half-minute glaſs carefully attended to, the error in the diſtance will be very inconſiderable, and conſequently the drift of the current, on making land, known very near the truth; and this muſt be added to or deducted from the reckoning by account. By purſuing this method we ſhall advance one ſtep towards a more certain knowledge of them.

Though we are not yet able to determine the velocity of the currents, nor the times of their ſetting, yet

yet we can advance one ſtep towards it, namely, that they always ſet towards the E. nor is there a ſingle inſtance to the contrary, unleſs very near the land on the W. ſide of America near Cape Horn; the proximity of the coaſt cauſing there a great variety of eddies, and Terra del Fuego, being compoſed of a cluſter of iſlands, forming as many channels, the courſe of the current is altered according to their diſpoſition; and at a ſmall diſtance from them the meeting of theſe currents is plainly diſtinguiſhable.

IN the account of Don George Juan's voyage inſerted in the ſequel, though his courſe in weathering Cape Horn, was nearly in the ſame latitude as ours, but a month later as to time, and the weather and winds very different, yet no current was perceivable; which confirms what I have already obſerved.

THOUGH the general winds here are towards the W. and S. W. thoſe from the E. are ſometimes known, as we experienced in paſſing between the 57th and 58th degree of latitude, and for three or four days after we leſſened our latitude. This, however, ſeldom happens; and therefore a ſhip bound into the South-Seas when in the latitude of Cape Horn, ſhould keep as near the wind as poſſible, if it be at N. W. or any other intermediate point between the S. W. theſe being the reigning winds in all ſeaſons, taking advantage of the firſt in order to gain the neceſſary latitude, which ſhould be ſomething above 60 degrees, that if ſhe ſhould be obliged to tack with the wind at S. W. ſhe may have ſufficient ſea-room in weathering the Cape; for otherwiſe if the wind ſhould take her ſhort, after two or three days, it would be neceſſary to return again to a higher latitude; and this is, at all times, attended with great fatigue and hardſhip, both on account of the rigour of the climate, and the frequency of ſtorms, attended with the moſt terrible ſeas. It was the middle of ſummer when we came round the Cape, yet the ſnow and hail fell very thick, and the cold

cold was proportional. And though when we were between the 57th and 58th degree, there was very little wind, yet we had, to the great fatigue of the ſeamen, a very heavy ſea from the S. W. and W. and ſometimes the ſea run in two or three different directions.

From our leaving the bay of Conception, till 17th Feb. when we were in the latitude of 45° 17′ the differences either with regard to exceſs or deficiency between the latitude by account, and that obtained by obſervation, were inconſiderable: but from that day, the latter was always greater than the former, as will appear from the following ſeries. From the 15th of the ſame month to the 17th, the latitude by obſervation exceeded that by account 18 min. from the 17th to the 20th, 32 min. from the 20th to the 23d, 37 minutes and a half, from the 23d to the 27th, 33 minutes, from the 27th, to the ſecond of March, 43 minutes, and from the 2d of March to the 6th, 20 minutes and a half. We were now according to my computation, 12° 6′ E. of the meridian of Conception, and in the latitude of 56° 44′. After this the difference between the latitudes by account and obſervation began to decreaſe; but ſometimes the latitude by obſervation exceeded that by account, and at other times was leſs. From the ſixth to the ſeventh the difference was four minutes and a half; nor did it exceed five or ſix at the end of three or four days in which we had no obſervation. This evidently ſhews that from the above latitude of 45° 17′ the currents began to ſet to the ſouthward, and when the land parallel to their courſe failed, they ran towards the eaſt, when it was impoſſible to diſtinguiſh them, But that there were ſtill currents, and very ſtrong ones too, ſeems to me beyond doubt; and it is much more natural to think, that the prodigious volume of water which ran towards the ſouth, when there was no longer any land to obſtruct its courſe, ſhould incline

incline towards the E. rather than towards the W. the latter being the quarter from whence the wind proceeded.

ON the 30th of March, being in the latitude of 34° 27′ S. and, according to my account 32° 47′ E. of the meridian of Conception, we came into a current, which ſeemed to ſet S. E. the latitude by obſervation exceeded that by account by 10 or 11 minutes. But from the 21ſt of April, being in the latitude of 25° 9′, and 36° 15′ E. of Conception, the two latitudes agreed, and thus continued till we reached the iſland of Fernando de Norona.

THE variation, of which we ſhall ſoon give a catalogue, gave us to underſtand from the time we were under the meridian of Cape Horn, that the currents carried our ſhips towards the E. founding our judgment on the difference between thoſe obſerved, and thoſe given us in the journals of other voyages, conformable to the places where we made our obſervations. And as they may be ſerviceable to others in making the ſame voyage, in order to render them ſtill more uſeful than if I had adapted them to the longitude from my account, as that was not the real place where the obſervations were made, I have corrected the longitude in the manner I am going to explain.

IT being certain from what has been ſaid concerning the currents, that their effects became ſenſible from 45° ſouth latitude in a S. E. direction to the latitude of 56 or 57 degrees; that from thence they continued to run directly E. till we were in the latitude of 34° 27′, and 32° 47′ E. of the meridian of Conception; where their courſe turned to the S. E. and continued to run in that direction till we came into the latitude of 25° 9′, and 36° 15′ E. of Conception, where they ceaſed. It will therefore be neceſſary to divide, in all journals the 12° 36′ 30″, which the ſhip was to the eaſtward of my reckoning, in a proportion agreeably

to

to the interval of time between their beginning and ceſſation, regard being had to their velocity in thoſe parts when they were moſt evident by the difference between the latitudes by account and obſervation, and this will give the true place of the ſhip correſponding to the different obſervations.

The obſervations having been made either at ſunriſing or ſun-ſetting, and the daily reckoning not been adjuſted till noon, according to the common practice at ſea, occaſions, between the longitude determined that day, and that in which the ſhip really was at the time the variation was obſerved, a difference, which ſometimes amounts to a degree or more, I have therefore taken care in the following table to ſettle the longitude and latitude agreeable to the hour when the variation was obſerved.

A TABLE *of the* VARIATIONS *obſerved in the Voyage from the* BAY *of* CONCEPTION *to the Iſland of* FERNANDO DE NORONA, *in different latitudes and longitudes, the latter being reckoned from the meridian of* CONCEPTION.

Days.	Lat. South. Deg.	Min.	Long. from the Mer. of Concep. Deg.	Min.	Variations. Deg.	Min.	Times of making the Obſervation.
28 Jan.	36	16½	1	8 W.	*13	17 E.	Evening.
7 Feb.	36	23	9	25 W.	10	45	
28	57	41	0	10 E.	23	20	
2 Mar.	58	32	4	1	22	14	
8	55	28	16	24	*26	44	Morning.
9	54	57	18	32	20	00	
11	52	42	19	59	18	50	
12	50	57	22	12	18	44	Evening.
13	49	22	23	35	18	32	
14	47	52	24	24	18	42	
26	38	36	34	41	9	0	Morning.
27	37	46	35	49	10	30	
30	34	27	37	11	6	23	Evening.
1 April	33	06	35	19	5	55	Morning.
1	32	42½	34	39	5	45	Evening.
2	32	15	34	27	5	10	Morning.
4	31	30	34	02	6	0	Evening.

Days.	Lat. South. Deg.	Min.	Long. from the Mer. of Concep. Deg.	Min.	Variations. Deg.	Min.	Times of making the Obſervation.
8	29	4	37	48	4	0	Morning.
16	27	16	46	0	*2	5W.	Evening.
18	26	48	48	18	*2	15E.	
19	26	49	49	1	0	40W.	
20	26	7	48	57	0	30	
Ditto	25	44	48	46	0	15	
22	25	01	48	47	1	30	
22	24	55	48	47	1	18	Evening.
24	24	43	48	44	0	45E.	
26	24	00	48	48	0	08	
27	23	04	48	14	0	00	
29	21	30	47	10	0	15E.	
1 May	20	24	46	56	0	30	
2	20	15	47	10	0	05	
3	20	00	47	05	1	50W.	Morning.
3	19	51	46	45	0	20E.	Evening.
4	19	34	45	43	*3	00	
5	19	23	45	06	0	20W.	Morning.
7	18	21	45	02	1	30E.	
9	15	49	45	11	2	00	
10	13	16	45	20	0	50	Evening.
12	9	34	45	57	0	05	
17	4	10	45	29	0	22W.	Morning.
19	4	17	43	55	1	41E.	
19	4	18	43	40	3	25	Evening.
22	3	53	42	32	2	47	
31	3	53	42	32	1	33	

THE two laſt obſervations were taken in the harbour of Fernando de Norona; and thoſe marked with an * were not determined with the deſired accuracy, ſome accident intervening at the time of the obſervation.

IT will be proper, for mariners unacquainted with the precautions cuſtomary in a voyage little frequented to obſerve, that in this part of the paſſage they may expect to meet with very tempeſtuous ſeas, continual ſqualls of wind and fogs; ſo that it is abſolutely neceſſary in the night and in hazy days to keep a very careful look out againſt the ice, large iſlands of which, breaking from the ſhore, are driven by the wind beyond the latitude of 64°, and ſhips too often meet with

with them from 55° upwards. They are usually nearer the shore towards the end of winter than in summer, when beginning to loosen themselves from the land, they gradually move from it; and not dissolving by reason of the continuance of the coldness of the air, they are always seen at higher latitudes than that of 60 degrees. The Hector, a register ship in her passage from Cadiz to the South-sea was lost on one of these islands of ice; and many others have narrowly escaped the like misfortune.

These masses of ice and the many eddies of the currents render it advisable to keep a good offing at weathering the Cape in the return from the South-sea, especially as there are some islands at a little distance from the coast, reaching to 56 degrees at least. These are at all times dangerous, both from the difficulty of determining with certainty, on account of the currents, the place of the ship; and likewise from fogs which are there so common and thick, that the whole day is as it were turned to night, and the darkness such that those on the poop cannot see the men on the forecastle. These dangers render it therefore advisable, that the ship in returning to Europe, should always stand into the latitude of 58 or 60 degrees.

In passing into the South-sea, a larger latitude even from 60 to 63 or 64 degrees, as the wind will admit, and then steering W. 60 or 80 leagues beyond what may seem necessary by account, will be advisable; because if the ship should have met with currents, sufficient allowance would be made for them; and consequently the great inconvenience prevented of not weathering the Cape; which might be the case without the allowance of these 60 or 80 leagues. This western distance, after it appears, by the reckoning that the ship has weathered the Cape, will be of little consequence, if we consider the great advantages gained thereby; it is always better for the ship to be obliged to sail 100 leagues eastward, till she makes the western coast of Ame-

America, than to want but one of being to windward of it; for to gain only this one league, the ſhip muſt go a great way back to the ſouthward, before ſhe will be able to get round the Cape; eſpecially as there is little chance of having a fair wind. In a ſubſequent chapter, I ſhall more fully conſider this ſubject, and ſpecify other precautions neceſſary to be obſerved in ſailing on that ocean.

CHAP. III.

Arrival at FERNANDO DE NORONA, *Deſcription of the Iſland.* *

WE now, from our reckonings and other ſigns, concluded that we could not be at any great diſtance from the iſland we were ſearching for; and accordingly on the 20th of May, when a fog came on with rain, we laid to under our top-ſails, rather from an apprehenſion of overſhooting the iſland than of loſing company or running foul of each other. On the 21ſt, having an appearance of fair weather, the frigates made ſail, and at half an hour after nine, the Louis Eraſme diſcovered the iſland bearing weſt one quarter ſoutherly, diſtance nine leagues, as was afterwards verified by the log-line.

THIS iſland we imagined to be totally deſart; but from a ſuppoſition that for the conveniency of its harbour, ſhips of any nation returning from the Eaſt-Indies might, either for water, or on any other neceſſary occaſion put in there, it was agreed by the captains of

* The Portugueze have induſtriouſly ſpread a report of the barrenneſs of this iſland, although it is well known to thoſe who have had the fortune to touch there, that there is not a more fertile iſland in theſe ſeas, nor any one that affords ſuch plenty of neceſſaries, which every ſhip ſtands in need of after a long paſſage. A.

the

the French frigates to go in, and under Engliſh colours, in order the better to conceal their courſe; and in caſe we found any ſhips of the enemy, to take the beſt precautions in their power for defence. But to our great ſatisfaction, we ſaw, on our approach, two forts with the Portugueſe flag flying, and a brigantine with an enſign and long pennant of the ſame nation. We were the more ſurprized at this, as according to all the accounts we had received, the iſland was a deſart, having been forſaken by the Portugueſe as not ſuſceptible of tillage: but on our arrival we were informed, that the French Eaſt-India company had made a ſettlement on it as a convenient place for their ſhips to put in at for refreſhments: but the court of Portugal being unwilling that either the French or any other nation ſhould have a ſettlement ſo near the coaſt of Brazil, obliged them to evacuate it. This reſolution was taken about ſeven years ſince, after which, theſe and other forts were erected, and a colony ſettled on the iſland *.

We now began to conſider whether it was poſſible to procure any true account of the ſtate of affairs in Europe; or whether Portugal, in the preſent war, might have gone farther than a neutrality. But as this could not be immediately determined, it was thought adviſeable for the three frigates to agree on ſignals of certain import to be made at going into this harbour. In order to get in it is neceſſary to weather the iſland on the north ſide, as the force of the current to the ſouthward is ſuch, that it cannot be done at leaſt under four or five days or more, beating to wind-

* In this iſland there is only a garriſon of ſoldiers (which is relieved every ſix months from Pernambuco) except male felons, who are tranſported from the coaſt of Brazil hither, where their ſtations are no better than ſlaves to the garriſon; unleſs they may be proper to act the part of Noevolus in Juvenal's ninth Satire, for here it may be ſaid Αὐτὸς ἐφέλκεται ἀνδρακίναιδος, as there is not a woman on the iſland. A.

ward

ward up to that part where the currents do not obſtruct the entrance. Having been previouſly informed of this, when we found ourſelves to the ſouthward, and ſo near as I have mentioned, we ſteered S. W. 5 degrees weſterly, and after ſailing near a league till we weathered the iſland, we ſtood S. $\frac{1}{4}$ ſoutherly, with the ſhip's head directly towards a large mountain, betwixt two others plainly diſtinguiſhable; but that on the E. ſide was larger than that in the middle, and the other on the W. a high rocky peak, that looks as it were falling towards the E. and on account of its height and figure called the Campanario,* or the belfry. The currents here ſet ſo ſtrongly to the weſtward, that after ſeveral tacks, inſtead of gaining ground, we found ourſelves carried further from the iſland; ſo that in order to avoid any further inconveniency, we came to an anchor at ſome diſtance from the proper anchoring-place, in twenty-five fathoms water, the bottom mud mixed with ſhells and gravel; about a league and a quarter from the ſhore, fort Remedios, the largeſt of thoſe built for the defence of the harbour, bearing S. S. E. The prodigious ſea here occaſioned by the violence of the wind, and the ſtrength of the current cauſing our frigates to ſtrain on their cables, obliged us to weigh, and ſtand farther into the uſual anchoring-place, beyond which no ſhips are permitted. This is about $\frac{1}{3}$ of a league from the ſhore: and here on the 23d of March, the Louis Eraſme anchored in thirteen fathom water, the bottom of a fine white and black ſand; fort San Antonio bearing E. 5 degrees ſoutherly, Remedios, S. $\frac{1}{4}$ weſterly, Conception S. S. W. 4 degrees weſterly, and Campanario peak S. W. 3 degrees ſoutherly.

This iſland has two harbours capable of receiving ſhips of the greateſt burthen: one is on the N. ſide, and the other on the N. W. The former is in every

* Church tower, which it much reſembles. A.

reſpect the principal both for ſhelter, capacity, and the goodneſs of its bottom. But both are entirely expoſed to the N. and W. though theſe winds, particularly the N. are periodical, and of no long continuance. Theſe harbours, however, when theſe winds do prevail, are both impracticable, the ſhips being in danger, and all communication with the ſhore entirely precluded by the agitations and violence of the ſurface; for the coaſt being every where lined with rocks, no boat or veſſel can come near it without the greateſt danger of being beat to pieces. And even in the ſeaſon of the eaſterly winds, you cannot land without ſome danger. This interval indeed affords ſome days when the agitation of the ſea is greatly abated, but even in theſe the landing muſt be done with great circumſpection; and at other times the violence of the ſea, and the rocks on all ſides render it utterly impracticable. Thus throughout the whole year this harbour is by no means a deſirable retreat; but happily ſerves on an urgent neceſſity of making land, notwithſtanding the danger or inconveniency that may attend it.

After the Portugueſe had cauſed the French Eaſt-India company to remove from this iſland, they ſecured it to themſelves by fortifications; for beſides the three forts which defend the N. harbour, it has two others for the defence of the N. W. and two in the E. part of the iſland in a ſmall bay, though fit only for ſmall barks, and difficult even to theſe. The forts are all of ſtone, ſpacious and well provided with large artillery. Thus though the whole length of the iſland is ſcarce two leagues, and it does not yield wherewithal to ſupport the garriſon, and the few other inhabitants, it has no leſs than ſeven elegant forts. It is under the government of Fernambuco, from whence it is ſupplied with proviſions and other neceſſaries. But the jealouſy of the Portugueſe, leſt any other nation ſhould get footing on it, and make that the fountain of farther pretenſions, has induced them

them to ſpare no expence for keeping the forts in a condition to aſſert their ſovereign right againſt any intruders.

THE principal fort ſtands on a high ſteep rock waſhed by the ſea, at the foot of which is a cavern, where vaſt quantities of water are continually pouring in without any ſenſible outlet. In this place are heard at ſhort intervals, very dreadful eructations of the wind, which being compreſſed ſtruggles for a vent againſt the torrent of the water, and by filling the whole mouth of the cave in its aſcent, leaves a large vacuity after its diſcharge, which is done with a noiſe reſembling that of a volcano: but neither on the oppoſite ſide of the iſland, nor throughout its whole circuit, is there any place or mark which affords the leaſt room for conjecture, with regard to the other mouth of this cavern; ſo that it is ſuppoſed to be at a great diſtance from it in the ſea.

THE barrenneſs of the iſland does not proceed from any defect in its ſoil, which produces every ſpecies of grain, and fruits common in hot climates, as experience has ſufficiently demonſtrated; but from the want of moiſture: for beſides two or three years often paſs without any rain, there is not the leaſt drop of water to be found throughout the iſland except in ſome brooks; and by reaſon of this ſcarcity the plants wither and die away in their growth. The moſt fruitful parts of the iſland, unleſs when ſoftened by moiſture from the clouds, become as arid and barren as rocks. At the time we were there it was two years ſince they had any rain; but on the nineteenth of May came on violent ſhowers, which continued the whole time we remained near the iſland. The inhabitants uſe the water which they ſave in pits reſembling ciſterns, but this as well as the waters of the brooks on its beginning to rain, grow thick and

brackiſh. The Portugueſe indeed ſay that in the inward parts of the iſland where theſe brooks have their origin, water is never wanting; and that it is clear and wholeſome.

In the inland part of the iſland is a Portugueſe town, in which reſide the pariſh prieſt and a governor, who on advice of any ſhips being in ſight repair to the forts, which are all well garriſoned, there being in fort Remedios alone, while we were there, near 1000 men, partly regulars ſent from Fernambuco, which are relieved every ſix months, and partly tranſports, from all that coaſt of Brazil: an Almojarife or treaſurer, and a proveditore, who controuls the payments and iſſues of proviſions to the troops and others; which is done with an equity and exactneſs worthy the imitation of Europeans.

The common food of the inhabitants of all ranks, both here and throughout Brazil, is the farina de Pau or wood-meal, which is univerſally eaten inſtead of bread.* It is made of the root called Moniato, of which I have given an account in the deſcription of Carthagena; as well as of thoſe of Name and Yuca. They firſt cleanſe it and then macerate it in water, till the ſtrong and noxious juice in it be entirely extracted; then grate or grind it into meal; which having again ſoaked in ſeveral waters, they dry, and then eat it with a ſpoon, or mix it with other foods. They are ſo habituated to it, that even at a table where they have wheat bread at command, with every mouthful of it they take a little of this meal. Beſides this flour, which is little more than wood meal or ſaw duſt, both with regard to taſte and ſmell, they eat a great deal of rice and ſugar-cane, brought from Fernambuco. †

* Caſava, in Portugueſe called Mandioc, which is a very nouriſhing food, and the beſt ſubſtitute for bread I ever met with. A.

† N B. This town ought to be written and pronounced Pernambuco. A.

Here

Here are two tranſports belonging to the king of Portugal, for bringing proviſions and ſoldiers, the latter of which is done ſo methodically, that the time when they are to leave Brazil is ſettled: and thus while one is coming towards the iſland, the other is returning with the late garriſon.

AFTER the ſecond ſettlement of the Portugueſe here, beſides the little plantations which was one of their firſt cares, they alſo brought over cows, hogs, and ſheep, in order to breed thoſe uſeful creatures; and as a ſmall quantity of fleſh ſerves the Portugueſe, they are, even in this barren ſoil, ſo greatly increaſed, that during our ſtay here we had the pleaſure of victualling our crews with freſh proviſions; and at our departure took on board a quantity ſufficient to laſt us for ſeveral days.

THESE harbours or roads abound in fiſh of five or ſix different ſpecies: and among theſe are lampreys and Morenos; the laſt are of an enormous ſize, but neither of them palatable. At the bottom of this harbour is taken a fiſh called cope, from its triangular figure. It has a ſnout not unlike that of a hog; and its whole body incloſed in one bone reſembling horn, within which is the fleſh, entrails and other parts. On the two upper ſuperficies it is covered with green ſcales, and underneath with white. It has two ſmall fins like other fiſhes, and its tail, which is horizontal, is alſo ſmall. On being taken out of the water it immediately emits from its mouth a greeniſh froth of an inſupportable ſmell, and which continues for a conſiderable time. Some of our people who had ſeen this fiſh in other parts affirmed, that its fleſh is of ſuch a poiſonous nature, as to cauſe the bodies of thoſe who eat, though but moderately of it, to ſwell till they burſt. But the people on this iſland were as poſitive to the contrary, and affirmed it from their own experience.

They however make uſe of this precaution before they eat it, namely, of laying a great weight on it, that all the malignant particles might the better ooze out in the foam: and after keeping it a whole day in this manner, they open the hard ſhell within which it is incloſed, boil it till about half ready, and then ſhift it into another water. By theſe precautions they affirm that all the noxious particles are extracted. But, in my opinion, this troubleſome proceſs is thrown away, the taſte of its fleſh not being at all anſwerable: and were it even in any degree palatable, ſurely the remembrance of its fetid ſmell muſt diſguſt the ſtomach.

During the ſeaſon in which the turtles lay their eggs, namely from December to April, the ſhores of the whole iſland are covered with them; after which retiring into the ſea they diſappear, as was the caſe when we were at Norona. In theſe months the winds are at N. and N. W. and from May forward they ſhift to the E. ſometimes inclining to the S. E. and at others to the N. E. The latitude of this iſland, as taken by ſeveral French pilots, at the time it was in poſſeſſion of that nation, is 3°, 53′ S. and thus it ſtands in the new French map; and lies 33° W. of the obſervatory at Paris. Its diſtance from the coaſt of Brazil is betwixt 60 and 80 leagues; but this is not preciſely determined, the French map placing it 60 leagues E. of it, whilſt the Portugueſe pilots belonging to the tranſports, and who, conſequently, ſhould be well acquainted with the paſſage, judge it to be 80 leagues. By taking a medium betwixt the two, the diſtance will be 70.

On the frigates coming to an anchor in the bay, and all our apprehenſions diſſipated by a certainty that the Portugueſe poſſeſſed this iſland, we took in our Engliſh colours, and hoiſted French; and ſucceſſively ſaluted the Portugueſe flag, which was anſwered

ſwered by all the three forts in the bay. Afterwards an officer of the Marquis d'Antin was ſent aſhore with compliments to the governor, in the name of the captains and maſters of the frigates. After a very polite reception, the governor ſignified to the officer that his duty obliged him to be fully informed what frigates they were, whence they came, and whither they were bound; and that he deſired the captains would ſend him a written account, together with their commiſſions, invoyances and clearances. And this indiſpenſable demand being complied with, they might depend on all the friendly offices within his power. This was immediately done: and on his part, after an attentive peruſal of the ſeveral papers, being ſatisfied with their contents, he wrote a very obliging letter to the captains, offering them whatever the iſland afforded: for beſides his own perſonal diſpoſition to act up to the laws of hoſpitality towards all who ſtood in need of ſuccour, he and all the governors of Brazil had expreſs orders in their commiſſions from their ſovereign to ſhew all manner of friendſhip to any ſhips belonging to other ſtates, which might put into their ports; and likewiſe to furniſh them all equally with whatever they wanted, provided it was not detrimental to his people or veſſels, nor give juſt cauſe of complaint to any other nation at war. The French captains were not wanting to ſhew their ſenſe of ſuch humane and prudent expreſſions; and the generous governor ſoon ſhewed they were ſincere, by furniſhing whatever proviſions we required as neceſſary, ordering a number of Indians to aſſiſt us in watering, and the tranſport to receive on board ſo much of the cargo of the Delivrance as was neceſſary to lighten her, in order to her being caulked and careened, that ſhe might perform the remainder of the voyage with ſafety and diſpatch.

NOTWITHSTANDING all the civility and friendſhip of the governor in every particular, we were the

ſame condition in the iſland, with regard to recreation and amuſements, as if we had been at ſea; being hardly permitted to go aſhore; the Portugueſe from their natural ſuſpicion and jealouſy obſerved their orders with ſuch preciſe ſtrictneſs, that to go from the ſhore to the principal fort where the governor of the iſland reſided, was the only walk allowed: and in this he who went aſhore was attended with three or four ſoldiers, who never left him till he returned to the boat, which was immediately ordered to be put off. Guards were placed in all quarters of the harbour; and on ſeeing any boat, they immediately ran to the place they ſuppoſed ſhe intended to land at, in order to accompany the paſſengers. * Theſe diſagreeable precautions, however, are to be imputed to the abrupt ſettlement made on this iſland by the French Eaſt India company, when the Portugueſe retired from it; and now thinking it a place of great importance to the French, they preclude them from any acquaintance with the inland parts of the iſland, leſt ſuch a knowledge might facilitate the execution of their ſuppoſed deſigns, namely of taking it from the Portugueſe, and fortifying themſelves in ſuch a manner as not to be eaſily diſlodged.

* The Portugueſe are very cautious in this reſpect, fearing ſtrangers ſhould know the fertility of an iſland, ſo near to their rich ſettlements the Brazils, from which iſland a contraband trade might be carried on, if there were a ſettlement, or the governor could be bribed. But they take care to make the moſt dependent officer governor, and prevent the iſland from properly becoming a ſettlement, by not permitting a woman to live on it. A.

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An Account of ſome Parts of the BRAZILS.

By Mr. JOHN ADAMS.

IN this place it will not be amiſs to take notice of ſome parts of the Brazils, which are quite unknown to the Engliſh, except their names.

THE moſt remarkable places to the northward of Pernambuco, are Rio Grande and Rio Paraiba, both which are yearly viſited by a great number of ſmall veſſels, the crews of which are employed in killing cattle; more for the ſake of their hides, and tallow, than their fleſh; of which, nevertheleſs, they jerk great quantities, for the uſe of ſuch ſhips as ſail from Pernambuco, Bahia Todos os Santos, and Rio de Janeiro to Guinea. The inland parts up theſe rivers are inhabited by Indians, called Tapuyes; many of whom ſend yearly large droves of cattle (through the Tupique nation, which extends from the ſource of Rio St. Franciſco, in lat. 8° S. to that of Rio Doce, in 20° S.) to Bahia Todos os Santos, and Rio de Janeiro, where they ſell them for three or four cruſadoes a piece (a cruſado is about 2s. 8d. ſterling), or exchange them for knives, hatchets, &c. or coarſe baize; for a yard of which they will give a good beaſt. The reader who deſires to have a particular account of theſe Indians, I refer to authors who have written the deſcription of this part of the world, and treated of their cuſtoms and manners at large; I intend only to touch upon ſuch matters, as, I believe, are at preſent unknown to my countrymen.

PERNAMBUCO, or Olinda, is a large trading town, and the capital of this part of Brazil; it has a governor ſubordinate to the viceroy at Bahia Todos os Santos; but as this town is pretty well known to geographers, I ſhall mention only a recent piece of Portugueſe policy, that

that was acted here, to keep the Engliſh from the knowledge of theſe parts; I think it was in the year 1761. Two India ſhips appeared in the offing (one was the London, Capt. Webb, the other I have forgot) where they brought to, and ſent their boats on ſhore to deſire leave to come within the reciffe (that is the ledge of rocks which form the harbour); but the governor had ordered the pilots to ſay, there was not water enough on the bar, notwithſtanding there is no leſs than twenty-four feet at low water mark. The Indiamen were therefore obliged to cut their cables (it being impoſſible for them to weigh where they had brought to), to leave their anchors behind them, and ſtand away for Bahia, where they met with a more favourable reception.

To the ſouthward of Pernambuco is the bay of Vaſabarris, into which the river St. Franciſco diſembogues itſelf, and occaſions ſuch eddies to the diſtance of three or four leagues from the land, that few veſſels which approach near the ſhore in this bay eſcape ſtranding. About thirty leagues inland the river St. Franciſco loſes itſelf, running under ground for ſeveral miles, and again makes it appearance. I believe there is no river in the world of this breadth that has ſuch a ſubterraneous paſſage. There are ſeveral villages on the banks of this river, and large plantations, from which the inhabitants ſend yearly large quantities of ſugar, tobacco, and mandioc to Pernambuco, which commodities they exchange for cloathing, and implements of huſbandry. The bar of the river has not above eight feet water on it, which obliges them to uſe ſmall ſchooners for the conveniency of exporting their goods.

To the ſouthward of St. Franciſco lies Seregippe del Rey, of which we have a good account in moſt modern books of geography; I therefore proceed, to Rio Real, which, if it were not for the bar at the entrance, on which there is but ten feet water, would be an inlet to

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the moſt fertile and pleaſant part of the Brazils. Over the bar there is room enough, and depth of water ſufficient for the whole navy of England to ride in ſafety. About 4 leagues above the mouth, this river divides itſelf into four large branches, one running N. N. W. called Rio Fundo; another N.W. navigable for any veſſel that can get over the bar, up as far as the towns of St. Lucia and St. Euſtatia, from the latter of which it takes its name; a third called Rio de Pao Grand, or Great-Timber river, which runs W. N.W. The main branch, which runs W. S.W. is alſo navigable as far as the town of Badia, about twenty leagues from the mouth. On the banks of theſe branches there are many fine plantations, and ſmall villages, which ſend great quantities of ſugar, tobacco, and mandioc to Bahia, or Pernambuco, as the wind permits, which, on this coaſt blows N. E. from October to May, and the reſt of the year S. E.

This river runs into the ſea through four channels, formed by three ſmall ſandy iſlands, lying in the mouth of it. The three ſouthernmoſt channels are very ſhallow, and have not above ſix or ſeven feet on them at high water, nor above two or three feet at low water.

The above-mentioned bar is ſand, and often ſhifts eſpecially after the land floods, which are very great about December, when there are twelve or fourteen feet water on that part of the bar over which the northernmoſt channel directs its courſe. As ſoon as you have paſſed the bar, there is ſeven or eight fathom water, and at the diſtance of a quarter of a mile from it twenty or thirty fathom. The wind on this coaſt always blowing from the E. the ſurge and current running to the W. and moſt of the rivers diſemboguing into the ſea to the E. are the chief cauſe of the many bars on the coaſt of South-America: for wherever the two oppoſite currents deſtroy each other, there a bar is formed, which is

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nearer to, or farther from the ſhore according to the rapidity of the river.

From the above conſiderations I thought it practicable to open a paſſage for large veſſels up the river Real, and propoſed it to the inhabitants. My ſcheme was to have ſtopped up the three ſouthernmoſt channels, and have thrown the whole current of the river down the northernmoſt, which would have removed the bar farther out to ſea into very deep water, and in all probability have opened a paſſage for the largeſt ſhips into the fineſt harbour in the world. From the beſt eſtimation I could make, it would not have coſt 10001. But through indolence, or ſome ſecret cauſe, it was rejected.

About twelve leagues to the ſouthward of Rio Real is a ſmall harbour, called Torre Garcia de Avilla, which is defended by four pieces of cannon: the town lies about a mile above the port, on the higheſt land on this coaſt, and is the beſt for a ſhip to make, that is bound to Bahia while the N.E. wind blows; as the coaſt is bold as far as Punto de Tapoas, which is the eaſternmoſt land before you bear away for Bahia Todos os Santos, and may be known by a number of cocoa-nut-trees, which grow upon it. Give this point a good birth, and approach not within a league of the ſhore till the caſtle of St. Anthony, at the entrance of the bay, bears N. by W. then there is no danger till you are near the round fort, which before you come to, you may find anchoring ground enough in what depth you pleaſe.

The city of Bahia Todos os Santos dedicated to St. Salvador, by which name it is ſometimes known, lies up the bay about two leagues from Point St. Anthony on which the fort ſtands. The mouth of the bay, which is about three leagues wide, is formed by the main land on the ſtarboard ſide and by the iſland Taporico on the larboard. A ſhip may keep over on the larboard ſide within three quarters of a league of the

the iſland, and be pretty well out of the reach of the guns of fort St. Anthony, or St. Maria, which lies a little above; but I would adviſe thoſe who may be neceſſitated to ſail into this bay, in ſpite of the ſaid forts, to keep the lead going and to come no nearer the iſland than twelve fathoms water, as the ſhore is very foul.

THIS city is ſituated on an high eminence; at the bottom of which, on the ſtrand, is a large town called the Praya, which properly is the port, but generally they are collectively taken, and called Cidade de Bahia. The city and town are connected by three ſtreets, which run ſlantwiſe up the eminence, as it would be almoſt impoſſible to go right up: in two or three places they have long pulleys (inclined planes) two hundred yards in length, built up the ſide of this ſteep eminence, to draw up the goods from the Praya, where they have large warehouſes. Here is a ſpacious market-place, ſurrounded by piazzas, under which is kept a continual fair for goods, brought in from all parts of this country. At the firſt arrival of the fleet from Portugal it is difficult to find room to ſtand, as the inhabitants of the whole city flock down to market to buy up the private trade, which the ſailors bring over; every one of whom is allowed a certain quantity according to his ſtation.

AT the ſouthernmoſt part of the Praya is a conſiderable dock-yard, where they build large ſhips, or men of war. They alſo prepare vaſt quantities of timber for the purpoſe, in order to ſend to Portugal by thoſe men of war that convoy the fleet home. Is it not a pity our men of war from the coaſt of America are not loaded home with ſuch a cargo?

THE city of Bahia is pretty regular, and as well laid out as the unevenneſs of the hill on which it ſtands will permit. But I wiſh I have not exceeded my firſt propoſal, as it is difficult to ſuppoſe, that a city and bay ſo well known, ſhould have eſcaped the pens of

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all the modern geographers. All thoſe which I have ſearched are, however, ſilent as to any remarks on this place.

The next place on this coaſt is Rio Camamu, a large river, about twenty-five leagues to the ſouthward of Bahia; here are numbers of ſmall towns and villages, and the banks of this river are the beſt inhabited of any part of the Brazils. There are not leſs than three or four hundred ſmall veſſels employed by the inhabitants to convey their commodities to Bahia and Rio de Janeiro. The Jeſuits formerly held a great traffic with this place, and ſent a large frigate loaded from theſe parts to Paraguay, but with what goods I could never learn; the ſource of this river is in the centre of the gold mines, from which circumſtance it is eaſy to gueſs at ſome part of their cargo.

From hence to the Ilheos is a bold ſhore, afterwards very rocky and ſhoaly, till you get to the ſouthward of the Abrolhos. Off the mouth of Rio Grande there is not above 6 or 7 fathom water at the diſtance of 10 leagues from the land. On this coaſt there are many little harbours, and rivers whoſe borders are well inhabited; the chief of which are des Contas, los Ilheos, Rio Grande, and Porto Seguro; but their entrances are very dangerous without a ſkilful pilot, and their trade the ſame as at Camanu. I proceed, therefore, to Rio dos Caravellos, into which the Abrolhos forbid an entrance without the aſſiſtance of a ſkilful pilot. On the banks of this river are ſeveral little towns and villages, at one of which they build veſſels of one hundred tons burthen; this river was well known to the Jeſuits, and the moſt convenient place they could have thought of, if they had had a mind to finger any of the gold before it came under the inſpection of the king's officers; for moſt of the Bandeiras, or companies that go in ſearch of new mines, or to ſeek for gold in the torrents between the inland mountains, aſcend this river as far as they can in their canoes,

and

and return with their acquiſitions the ſame way. Thoſe Bandeiras likewiſe which go up the country by the way of Rio Grande, or Rio Doce, often return by this route to avoid the officers, who are ſtationed at the mouths of the laſt mentioned rivers. As I never happened to ſail into any of the rivers or harbours between this and Rio de la Plata, but ſuch as have been deſcribed by other writers, except Rio Doce, I ſhall conclude with a remark or two concerning this place. I believe it to be one of the moſt rapid ſtreams in the world; the current is ſo ſtrong, that the water may be taken up freſh at the diſtance of a league from the mouth of the river. Many veſſels built upon this river have ſailed out of it, but none ever returned; as it would be impoſſible to ſtem the current. There are many plantations on the banks of it, the planters of which convey their produce by land to a branch of the Janeiro, by which, with the help of canoes, they ſend their goods to the city.

IN the back ſettlements, from Rio Grande to Rio Doce, the inhabitants are much haraſſed by the Indians, who often maſſacre the planters, and plunder their plantations.

THESE few remarks will not be diſagreeable, I hope, to the readers of a voyage, which gives undoubtedly the moſt authentic account we have of South America. I own they have little pretenſion to the beauty and accuracy of expreſſion ſo conſpicuous in this excellent performance, but they have the merit of novelty to recommend them. Such as they are, unbiaſſed by intereſt or any private view, I give them to the public, together with ſuch other remarks, as, upon a very careful peruſal of the work, I have inſerted, by way of notes, at the requeſt of the proprietor.

Voyage

CHAP. IV.

Voyage from Fernando de Norona. *Engagement with two Engliſh privateers.*

ON our arrival in the harbour of this iſland, our firſt care was to repair the Delivrance; but upon examination, her condition was found ſo bad, that to have entirely completed her would have occaſioned too great a delay. It was therefore thought proper to repair her only ſo far, as was neceſſary againſt the danger and fatigue of being continually at the pump; and accordingly, when we came to ſea we found, that inſtead of repeating that fatiguing operation every half hour, once in an hour was now ſufficient.

Having taken in the neceſſary ſupplies of wood and water, with ſome calves and hogs, it was determined to proceed to ſea with all expedition, in order to retrieve in ſome meaſure, the delay which the repairs, however ſlight, of the Delivrance had occaſioned. June the 10th at ten in the morning the frigates got under ſail, and ſteered N. $\frac{1}{4}$ eaſterly till June the 18th, when they were in the latitude of 8 deg. 12 min. N. and 43 deg. 27 min. E. of Conception, having croſſed the line on the 12th, under the meridian of 42 deg. 45 min. E. of that city, and 32 deg. 47 min. W. of Paris. We had freſh gales at S. till we came into the latitude of 6 deg. N. where the wind abated and became variable; ſometimes at N. N. E. and N. E. and at other times E. S. E. and E. N. E. but never blowing with any ſtrength till the 8th of July, when, having ſteered N. E. and N. we found ourſelves in 34 deg. 31 min. N. lat. and 31 deg. 23 min. E. of Conception, where what little wind we had ſhifted to S. S. W. and S. W. From the 8th to the 31ſt of July we ſteered N. E. and N. E. $\frac{1}{4}$ northerly, except three days, when we ran E. N. E. and one day N. W. $\frac{1}{4}$ northerly, being forced to alter our true courſe by the winds, which veered to the N. and N. E.

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ON the second day after leaving the island, we lost sight of all birds of any kind, but saw great numbers of flying fish and bonitos. On the 13th of June in a clear night and settled breeze at S. E. without the least appearance of any disagreeable change, we were surprized by a storm of wind and rain, that all we could do was to bear up under our courses. It was indeed too violent to last; and accordingly about an hour after the weather cleared up. On the 15th we began again to see Tunny-fish in large shoals; and the 16th it was calm intermixed with gentle breezes and showers, till the 17th. The same weather continued the 18th and 19th, with now and then thick clouds in the horizon, which we observed afterwards to go off in violent showers.

ON the 20th of June in the lat. of 9 deg. 28 min. N. we saw a bird, the only one which had appeared since our departure from the island. It was something larger than the Pardela, of a dark brown colour, except the breast and lower parts of the body, and the wings remarkably long. On the 22d squalls and showers. On the 24th we saw great numbers of Tunnies, flying fish and cavallas, a fish not unlike a mackerel; and a bird of the same kind as that we saw on the 21st.

ON the 27th, being in 17 deg. 57 min. N. lat. the sea was covered with a kind of weed called Sargaso, which, pickled, is by many thought equal to Samphire: and along this verdant surface our course continued till the 7th of July, that is, till we were in the lat. of 33 deg. 31 min. when little of it was to be seen. Whereas for some days before the whole ocean within sight was, as it were, covered with it. During this time we also saw some birds; but particularly in the afternoon of the 29th of June, and on the 30th in the morning. Some of these were of a middling size and of a dark brown colour; also some black Rabiahorcados; and on the morning of

the laſt day we alſo ſaw ſeveral rabijuncos. On the 1ſt of July we again had ſight of the above-mentioned brown birds, but without any of the other two ſpecies: and on the 3d, being in 27 deg. 34 min. latitude, and 32 deg. 27 min. E. of Conception, we ſaw no kind of large fiſh, though abundance of the flying fiſh.

On the 8th, being in 34 deg. 31 min. latitude, we again had ſight of the Dorados; and likewiſe ſaw a middle-ſized bird all black, which for a long time continued hovering about the ſhips. On the 9th in the evening, we were ſurpriſed with the appearance of a ſmall whale; and on the 10th in the morning, being in the latitude 36 deg. 57 min. and 32 deg. 6 min. E. of Conception, we ſaw ſeveral birds of a middling ſize, with long and broad wings, the neck, head and tail black, and the other parts of the body white.

On the 10th, being in 36 deg. 57 min. latitude, and 32 deg. 6 min. E. of Conception, by my reckoning, according to which, and likewiſe in the Dutch and common French chart, the iſland of Flores, one of the Azores, lay E. N. E. 2 deg. N. diſtance 112 leagues. In the French chart are ſet down ſome iſlands, which, as being of later diſcovery, do not occur in the Dutch: among theſe is Santa Ana bearing weſtward five leagues; but by the new French chart, the iſland of Flores lay E. N. E. 5 deg. eaſterly, and at the diſtance of 167 leagues. All this morning we had a cockling ſea coming from the N. W. and by W. which we conjectured might proceed from the proximity of the iſland of Santa Ana, as by our reckoning it muſt have been very near us.

On the 17th being in 41 deg. 49 min. latitude, and 36 deg. 48 min. E. of Conception, we were amuſed with the ſight of vaſt flights of birds, of a middling bigneſs, and of a brown colour intermixed

6 with

with black, reſembling on the whole the Cormorant. On the 18th we alſo ſaw great numbers of the ſame birds; but from the 19th, when we were in 42 deg. 53 min. latitude, and 39 deg. 23 min. E. of Conception, they gradually decreaſed, ſo that we ſaw very few of them.

FROM the time of our leaving the iſland of Fernando de Norona, till we reached the equinoctial, the S. latitude by obſervation every day exceeded that by account ten or eleven minutes, that is, the ſhip did not in reality, make ſo much way as ſhe ſeemed to do by the log-line. But after paſſing the equator, the latitude, by obſervation continued ſtill to exceed that of the reckoning taken from the log-line: and as we ſtood directly north, it appeared that the ſhip's real way exceeded the diſtance meaſured; whence this corollary may be deduced, that in the ſouthern hemiſphere near the equinoctial, the waters tend ſouthward; and that, on the contrary, in the northern hemiſphere the current runs northward; which agrees with the accounts given of thoſe, who in the voyages to the Eaſt-Indies have ſeveral times had occaſion to croſs the lines. Till the 24th of June the courſe of the waters continued northward 10 or 11 min. a day; but when we reached 14 deg. 22 min. the latitude by obſervation began to correſpond with that by account.

THE differences between the latitudes by account and obſervation can only be attributed to the courſe of the water in the two hemiſpheres; and not to any defect in the meaſurement by the log-line: for were that the caſe, how can it be reconciled with this known circumſtance, that the way of the ſhip whilſt in the ſouthern hemiſphere was in reality leſs than it appeared by the log-line: and on coming into the northern hemiſphere, it was quite the reverſe. As little can it be charged on any defect in the inſtruments; for beſides the daily agreement of all con-

cerning the difference, when we were got out of these oppoſite courſes of the water, the latitude by obſervation agreed with that by account. The preceding reaſons alſo ſhew, that the perſon who tended the log-line was not careleſs; for if any error had been committed here, the difference would have continued, the management of it having on all occaſions been intruſted to the ſame perſon, who beſides his ſobriety and attention, was a complete artiſt. But the above cauſe is further evident from the continual uniformity of the diſtance, never exceeding ten or twelve minutes; or decreaſing betwixt ten and twelve minutes every day: and that if on any day the latitude had not been obſerved, on the day following the difference was found double; a circumſtance that not only proves the reality of the currents here, but likewiſe confirms what we have ſaid in chapter 2d, concerning thoſe in our paſſage from Conception to this iſland, excluſive of thoſe which will be mentioned in the ſequel.

On the 7th of June, being in 33 deg. 31 min. latitude, and 31 deg. 37 min. eaſt of the meridian of Conception, we ſuddenly felt a ſtrong motion of a current, which the more ſurprized us, as we perceived nothing of that kind the day before, though in the ſame latitude. However, we were confirmed that we were not miſtaken by our reckoning the following days, till the 11th, the latitude by obſervation daily exceeding by 13 or 15 min. that by account; but on the eleventh they again agreed. On the 12th in 39 deg. 44 min. latitude that by obſervation again proved different to that by account, the former being leſs than the latter, by 13 min. And on the 13th the difference continued to be the ſame. Thus the courſe of the current continued leſſening the ſhip's way, by carrying us ſouthward till the 15th and 16th, when the difference became greater, but in an oppoſite direction; that is, the currents carried

ried us northward. On the 17th they continued the ſame courſe, but on the 18th we found 27 min. difference; having ſuddenly entered into waters of a different courſe, that is, they again carried us ſouthward. Had this variety of differences been reported only by a ſingle perſon, doubtleſs from the ſtrangeneſs of the phænomenon, it would have been looked upon as a miſtake in the obſervation; but the reality of theſe dangers does not now admit of any rational doubt. The obſervations were taken by ſeven perſons, each with a different inſtrument, one of which was a quadrant invented by the celebrated Mr. Hadley, and all agreed in the differences. From the 18th day of the month to the 20th the difference betwixt the latitudes by obſervation, and that by account, proved to be 40 min. which was near double of that which had appeared in the courſe of the 18th; and on the 20th we were in the latitude of 43 deg. 8 min. and 38 deg. 57 min. E. of the meridian of Conception.

NOTICE has already been taken of the indifferent condition of the Delivrance at our departure from the iſland of Fernando de Norona. And thus it continued till the 16th, when whether it proceeded from the working of the ſhip or any other cauſe, the water increaſed ſo faſt that the ſhip was reduced to that diſtreſs, which had been the chief occaſion of our putting into the above iſland, and of our long ſtay there. On the 20th it increaſed upon us in ſuch a manner that the pumps were kept continually going the whole night; but on the 21ſt it ſuddenly abated to near a fourth part of what it had been the day before; a moſt ſeaſonable relief to the ſhip's company ſpent with a fatigue, which their fears rendered ſtill more painful. We obſerved that the water continued to decreaſe from the time of our getting into the ſargaſo or weeds, ſo that on the 27th the ſhip ſcarce made an eighth part of the water

as on the 20th. This happy change could be attributed only to the ſargaſo ſucked into ſuch ſeams as were open: and this farther appeared by ſeveral pieces of it thrown out by the pump; beſides a conſiderable quantity of the weed was ſeen ſticking to the outſide of the ſhip's bottom. But on the 29th the water began again to increaſe, and ſoon after abated; in ſuch variations it continued during the whole voyage. And we according to its ſtate, fluctuating betwixt hope and fear.

On the 21ſt of July, about ſix in the morning, being in 43 deg. 57 min. latitude, and 39 deg. 44 min. E. of Conception, we diſcovered two ſail within three leagues of us; bearing E. N. E. The rays of the ſun had hindered us getting ſight of them ſooner. They ſtood to the S. W. and our three ſhips kept on together N. E. without altering their courſe till ſeven in the morning, when being within little more than cannon-ſhot of each other, the largeſt of the two fired a gun with ſhot, and at the ſame time both hoiſted Engliſh colours, our frigates alſo formed a line, though little in a condition for fighting; for beſides being weakly manned, and the want of arms and ammunition, they had no nettings for ſecuring the men, ſo that both the quarter deck and fore-caſtle were expoſed.

We, however, after the enemy had hoiſted their colours, continued ſailing in a line, but ſtill in our proper courſes, till the ſmalleſt of the Engliſh ſhips bore down upon us, and fired ſeveral ſhot to oblige us to hoiſt our colours; on which at half an hour after ſeven a fire both of great guns and muſketry began on both ſides; and at eight o'clock the ſhips were within piſtol-ſhot of each other.

The force of the three French frigates was this, the Louis Eraſme carried twenty guns; eight on the quarter deck of eight-pounders, and the twelve on the fore-caſtle ſix-pounders, and had betwixt ſeventy and

and eighty perſons on board, ſeamen, paſſengers and boys. The Marquis d'Antin alſo carried ten guns on a ſide, the five aftermoſt of ſix-pounders, and the five forward of four; and had aboard about fifty or fifty-five perſons. La Delivrance was ſtill ſmaller than the other two, having only ſeven four-pounders on a ſide, and all the perſons on board did not exceed fifty-one.

THE enemy who afterwards proved privateers, were conſiderably ſuperior in force. The largeſt of them called the Prince Frederick, commanded by captain James Talbot, carried thirty guns, twenty four of them being twelve pounders, beſides croſsbar ſhots which ſtuck in our maſts and ſides, and ſix ſix-pounders on the quarter deck. The name of the ſmalleſt privateer was the Duke, captain Morecock, had ten guns on a ſide, and theſe likewiſe twelve-pounders, beſides padereros on both, which did great execution on our rigging. The Prince Frederick to all appearance keeping a continual fire both with the great guns and ſmall arms, could not carry leſs than two hundred or two hundred and fifty men, and the complement of the Duke from the like circumſtances we concluded to be about one hundred and fifty or two hundred.

THE fight was maintained with great reſolution and alacrity on both ſides, though under this conſiderable diſadvantage to the French, that one broad-ſide from the enemy did twice the execution of one from their ſhips: and as for muſketry, with which the Engliſh were well furniſhed, and kept an inceſſant fire, all that the French could uſe, was about twelve or fourteen on board each ſhip, it being preſent death for any one to ſhew himſelf on the fore-caſtle, and a muſket was what very few on board knew how to make uſe of. At length, about half an hour after ten the Marquis d'Antin, which was in our rear, ſtruck to the largeſt of the enemy, with

which ſhe was engaged, after loſing her captain, who died encouraging his men with the ſame vigour that he had begun the action. And however reluctant they who ſurvived were to the ſurrender, it was now become of abſolute neceſſity, the ſhip having received ſo many ſhot betwixt wind and water, that ſhe was on the point of ſinking.

The captain of the Delivrance, which was the headmoſt ſhip, ſeeing one of our company taken, and judging from this diminution of our force, there was ſtill leſs hope of a ſucceſsful event, he prudently crowded ſail, that whilſt the enemy's ſhips were taken up with their prize, that he might get from them; for no ſooner had the Marquis d'Antin ſtruck her colours, than the leaſt of the enemy's ſhips withdrew from the action which ſhe had alternately maintained with the other two, in order to ſecure the prize, whilſt the larger was to renew the fight. It was half an hour after eleven when the Delivrance thus began to ſeek her ſafety in flight: the Louis Eraſme could not heſitate to follow her example, but the largeſt of the Engliſh privateers was not long in coming up with her, and by the ſuperiority of their force, and the vigour with which they exerted it, ſoon laid her under a neceſſity of ſurrendering, though not till the worthy captain had been wounded, ſo that he died the following day. The two privateers being now taken up each with its prize, and the S. E. wind freſhening, favoured the eſcape of the Delivrance, which ſtood N. E. and at four in the evening got quite out of ſight both of privateers and prizes.

The cargoes of the Marquis d'Antin and the Louis Eraſme, thus taken, were valued at three millions of dollars, two in coin, gold and ſilver, and ingots, or wrought plate. The other conſiſted in cacao, which was the principal part of her lading; ſome Quinquina and Vigonia wool.

CHAP.

CHAP. V.

Voyage of the Delivrance *to* LOUISBURGH *in l' Isle* ROYALE *or* CAPE BRETON, *where she was also taken.*

THE captain of the Delivrance, after this, in all appearance, fortunate escape, consulted with his officers what course was most adviseable to steer. Among them was one who had often been at Louisburgh in the island of Cape Breton, near Newfoundland; and had a perfect knowledge of the situation and nature of the place. He likewise informed us, that in the beginning of the summer, two men of war were every year sent thither, to carry money and troops for that place and Canada: and likewise to protect the cod-fishery.

As this was the constant practice in time of the most profound peace, it was natural to suppose, that in a war with a maritime power, the number of ships would be increased: at least, this precaution had never been omitted in the last war under Lewis XIV, the place being of the utmost importance to France, as the key of Canada, the most secure port for the fishery, and carrying on a very considerable commerce with the islands of St. Domingo and Martinico. These reasons and this course appearing less dangerous than that towards the coast of Spain, determined the captain to pursue what he thought the safest method, and make for Cape Breton: besides, the condition of our ship scarce permitted any choice, as affording little hopes that she ever would be able to reach any port in Spain. We had likewise been informed at Conception, a little before our departure, that a company had been formed in London for fitting out thirty privateers from twenty to thirty guns, and to be stationed so as to intercept

intercept all ſhips coming from the Indies. Though this was in fact a falſe alarm, the misfortune of meeting the two abovementioned of a force agreeing with the report, gave it to us all the appearance of truth; and we concluded that there muſt be many more cruiſing in proper ſtations near the coaſts. This opinion was very natural to us, who for above two years had received no other accounts; and after what had happened, it would have ſeemed an inexcuſable ſtep, to have expoſed ſuch a valuable cargo, as that of the Delivrance, in ſuch a heavy veſſel, as muſt unqueſtionably have fallen into the hands of the firſt enemy that ſhould give her chace. All her force conſiſted in fourteen four-pounders, and about fifteen muſkets; beſides nine of our people had been diſabled in the laſt action: and what was ſtill worſe, we had little or no powder. Another bad circumſtance was, that from the damage the ſhip had received in the action, ſhe made ſo much water, that though we began to pump immediately on the concluſion of it, it was midnight before we could free the ſhip; and every one who had received no hurt in the action, without diſtinction, voluntarily took his turn in the labour. Weighty as theſe reaſons were, that the captain and his officers might not be charged with taking ſuch an important ſtep of themſelves, a repreſentation was alſo made to the paſſengers, who all readily approving of it as the beſt reſource in our preſent exigency, the very ſame evening our courſe was altered, and we began to ſteer for Louiſburgh as a port of ſafety.

The place where the action happened, according to my reckoning, and the new French chart, was 96 leagues N. W. five degrees weſterly from the iſland of Flores.

After changing our courſe we ſteered N. W. one quarter weſterly, and W. one quarter northerly, till the 28th, when by obſervation we found ourſelves in the latitude of 46 degrees, 18 minutes, and 23 degrees

grees, 45 minutes eaſt of Conception, the winds generally being S. S. W. and W. S. W. One day only we had them at N. W. and W. N. W. and this was on the 23d after a very violent ſtorm, which began at twelve in the night of the 22d, at E. S. E. whence at ſix in the morning the wind flew about to the S. and S. one quarter weſterly, whilſt we lay to under our mainſail; and, when the wind offered, made way under that and a topſail with a reef in both; beſides the high ſeas which ſuch a ſtorm naturally occaſioned, we had alſo fogs and rains.

FROM the 46th degree we continued ſteering W. ſometimes a little towards the S. or N. endeavouring always to keep that latitude, though ſometimes the winds obliged us to alter our courſe: for though they were generally S. S. W. and S. W. though oftener in the firſt than the ſecond; they ſometimes came about to the N. E. E. and S. E. and theſe changes were always attended with hurricanes.

ON the fifth of Auguſt we found ourſelves in the lat. of 45 deg. 14 min. and 24 deg. 16 min. E. of the meridian of Conception; the wind, which till ſix in the evening of the foregoing day had been S. now became calm; and at two in the morning, we had it at W. N. W. and N. W. from whence it veered N. about to the E. and from thence again returned back to the N. E. freſhening more than it had done before. Afterwards it began to blow in ſqualls, and again ſhifted to the N. On the ſixth, at eight in the evening, it veered to the E. and two hours after to E. S. E. where it continued till ſix in the morning of the ſeventh, when it ſettled in the S. E. and abated; though its greateſt force here had never been ſuch as to render it neceſſary for us to lay to, as had been the caſe before, and was again afterwards.

ON the 7th, being in the latitude of 45 deg. 17 min. and the wind at S. at two in the afternoon it ſuddenly flew about to the W. where its extreme violence

obliged

obliged us to furl every ſail, and lie to. We had alſo here a very high ſea to encounter with, but in two hours our apprehenſions were relieved, the wind ſhifting to the N. W. and abating conſiderably; and two hours after it again returned to the N. whence at ten at night it veered to W. one quarter ſoutherly, and became ſo moderate that we could carry our top-ſails. Here it ſettled, and the weather became fair and eaſy; but theſe variations, by forcing us out of our true courſe, were of great detriment to us, as will be ſeen in the ſequel.

On the 10th, being in the latitude of 45 deg. 14 min. and 17 deg. 25 min. E. of Conception, with the wind at S. it began to blow, and at five in the morning we were obliged to take in all the reefs in our top-ſails; it then ſhifted to the S. S. W. with a prodigious ſea; ſo that at three in the afternoon we were obliged to lie to under a reefed mainſail. At ten o'clock it ſhifted to the S. W. and S. W. one quarter weſterly; when abating a little on the 11th, at ſix in the morning, we made way under our foreſail and topſails all reef'd; and the wind continued for ſome time in this rhomb.

The uſual inclination of the wind in theſe ſeas, and common to all parts of the northern hemiſphere, is to follow the ſun from E. to S. S. S. W. and N. ſomething like what has been obſerved in the chapters which treat of the South-ſea. And thus when it has blown a ſtorm, inſtead of continuing its inclination, it returns; and though with all the appearance of a calm, within a day or two it riſes again with redoubled fury. This is a difficulty not eaſily ſolved, for among the great number of perſons, otherwiſe doubtleſs reſpectable for their eminent talents, who have applied themſelves to inveſtigate the cauſes and origin of winds, not one of them has accounted for their irregularities and gradations, both with regard to their variations, impulſe, and direction.

IN this paſſage to the Newfoundland ſeas, ſtorms are very frequent, yet they differ according to the ſeaſons of the year. We have already ſeen that they moſt uſually happen when the wind is at S. and though the northern winds are very ſtrong, yet they do not equal thoſe of the former quarters. On attending to this particular, a certain conformity will be found betwixt the two oppoſite hemiſpheres; as in each, beſides the circulation of the winds, the ſtorms happen when they blow from that part of the pole oppoſite to that which is neareſt each hemiſphere. In the South-ſea the ſtorms generally riſe from the N. and W. winds; and in that of the N. they are occaſioned by the S. and W. winds.

THE hard gales which are met with in ſummer in the paſſage to Newfoundland, are of no long continuance, like the two with which we were ſurprized in this voyage: but they are more ſudden and violent than in winter; for from their beginning to the very height of their violence is ſcarce half an hour; and though in this ſeaſon they are not very frequent, yet it never paſſes without ſome: but in winter they continue three or four days ſucceſſively, and with no ſmall force. Theſe of both ſeaſons are more or leſs accompanied with fogs and ſhowers.

JULY the 31ſt, according to my account, at eight in the morning, being in 45 deg. 57 min. latitude, and 27 deg. 3 min. E. of Conception, we found by the whitiſh tinge of the water, that we had entered on the bank; and on ſounding found 55 fathom, and the bottom, ſand mixed with ſmall ſhells. On comparing the ſounding and the bottom with the new French map, my reckoning of the courſe was ſix or ſeven leagues too forward; that is, we had that diſtance to ſail before we came to a bottom of that kind. On the evening we tack'd with an intent of leſſening our latitude, as well to keep at a diſtance from Placentia, as to avoid ſome ſhoals lying at the weſt end of the

bank

bank in the latitude of 46 deg. and on this account we again ſtood from it.

On the 2d of Auguſt, being in the latitude of 45 deg. 30 min. 30 ſec. 27 deg. 2 min. E. of Conception, we ſounded, and found 70 fathom water, and the bottom rocky. We continued our ſoundings every day, and found the bottom as ſpecified in the following table:

Days	Latitude.	Long. from Merid. of Conception	Fathom of Water	Bottom	Colour of the Water
4 Aug.	45 14	24 38	40	ſmall gravel	green
5	45 12	23 50	48	brown gravel	whitiſh
6	45 8	22 56	48	ſtony	ſea blue
6	45 9	22 30	50	ditto	ditto
6	45 11	21 51	55	ſmall gravel and ſand of different colours	light blue
7	45 18	19 53	35	coarſe white ſand and ſmall gravel	dark blue
8	45 23	20 12	45	coarſe ſand of all colours and ſmall gravel	whitiſh green
8	45 26	20 7	no bottom at 80 fathom		ditto
9	45 20	19 12	ditto		light blue
10	45 16	17 14	45	ſtony	of a bluiſh green
	45 19	16 32	no bottom at 80 fathom		dark green

July the 27th, in the latitude of 45 deg. 54 min. and 32 deg. 6 min. E. of Conception, we ſaw ſome birds as it were ſporting on the water. The ſize of them was ſomething leſs than a wood pigeon, and all over black except the tail which was white. They who are converſant in theſe voyages ſay, that they are ſeen at a great diſtance from the bank; and thus we found it, being obliged to leſſen our longitude 5 deg. to return to our firſt ſoundings. We alſo ſaw two birds of that kind called Penguins, of which there are great numbers on the bank: and though in the common opinion theſe birds never fly to any great diſtance from it, we found it otherwiſe. Theſe Penguins are of the bigneſs and ſhape of a gooſe, alſo with little or no tail. They fly againſt the courſe of the

the water; their plumage on their breaſt and belly is white, but their back, the upper part of their wings, and all their neck, brown. As fiſh is their whole ſubſiſtence, they dart down into the water with prodigious celerity, and continue a long time under it in purſuit of their prey.

ON the 30th, in the latitude of 45 deg. 54 min. and 28 deg. 43 min. E. of Conception, we again ſaw ſome of the ſame birds as on the 27th, beſides ſome ſmall whales near the ſhip. During the whole remainder of the voyage we had always ſight of theſe kind of birds, and another very nearly reſembling the Penguin; but the bill was black, very large, and of a ſquare form. Both kinds ſwarm on the bank, but without it they are not ſo frequent. On our approach to the bank we alſo ſaw great numbers of cavallas, which abound all along the coaſts. We likewiſe ſaw ſome ſhoals of tunny fiſh. About the edge of the bank there is always a great ſwell: but on coming within the ſoundings, even in a hard gale of wind, though attended with a high ſea, it does not continue any longer than the wind; the one ſubſiding as the other abates.

IF I have been ſo very circumſtantial in my account of the voyage from Conception, and given a detail not only of the winds and times of the year, but alſo of the agitation of the ſea, in ſtorms and hard gales, the courſe, the colour of the water, and the ſigns of birds and fiſhes, I hope it will be attributed to my zeal for the improvement of navigation, and my deſire that mariners who are ſtrangers to this voyage, might be acquainted with theſe things, which are certainly of real utility; as by thus acquiring a knowledge of the latitudes and longitudes, which are punctually ſet down at every ſign or an extraordinary occurrence, they might be acquainted with the particulars of every part; and conſequently the better enabled to take the moſt proper meaſures;

meaſures; and that nothing may be wanting for their information in the particulars of this laſt voyage, I ſhall poſtpone the account of our misfortune at Louiſbourg, to inſert here

A TABLE of variations of the needle as obſerved in our paſſage, from Fernando de Norona, to Cape Breton, according to the latitudes, and longitudes from the iſland of Conception, in which the obſervations were made.

Days of the Month.	Lat. D.	M.		Long. D.	M.	Variations D.	M.		Time of making Obſervation.
June 11	1	24	S	42	35	2	39	E	Evening.
12	0	16	N	42	50	2	43	E	Ditto.
17	7	14		43	32	0	38	W	Ditto.
19	8	17		43	21	1	40		Morning.
27	18	16		35	46	1	15		Ditto.
July 3	27	11		32	34	0	10		Ditto.
3	27	58		32	24	1	20		Evening.
4	28	47		32	17	1	20		Morning.
6	32	44		31	58	6	50		Evening.
7	33	16		31	44	6	55		Morning.
9	35	47		31	46	7	0		Evening.
12	40	10		32	58	8	5		Morning.
13	40	22		34	17	10	55		Evening.
17	41	35		36	16	11	0		Morning.
20	43	24		38	41	11	0		Evening.
25	45	7		34	29	15	50		Ditto.
29	46	7		28	10	14	30		Ditto.
30	45	59		28	16	13	10		Morning.
Aug. 5	45	12		23	41	20	15		Evening.
8	45	22		20	12	13	20		Morning.
8	45	27		19	45	13	0		Evening.
9	45	22		18	39	15	15		Morning.

On the 24th of July, in the latitude of 44 deg. 52 min. by obſervation, which was 25 min. leſs than that by account, and according to my eſtimate 36 deg. 6 min. eaſt of Conception; no obſervation had been taken ſince the 20th. But we found that the currents had in each days ſailing carried the ſhip 6 min.

6 min. S. On the 25th in the latitude of 45 deg. 6 min. and 34 deg. 47 min. eaſt of the ſame meridian, we again found the latitude by obſervation to be 8 minutes leſs than that by account. But afterwards they agreed till we had paſſed the bank, when on the 12th of Auguſt, 16 degrees two minutes eaſt of Conception, our latitude by obſervation, was 45 degrees 58 minutes, an exceſs of juſt 30 minutes beyond that by the reckoning; and this great difference had commenced on the 9th, when we were in 45 deg. 22 min. latitude, and 19 deg. 1 min. eaſt of Conception.

FROM this difference it is manifeſt that, on the weſt ſide of the bank, betwixt it and Cape Breton, that is under the meridian of Placentia, the currents ſet to the northward, agreeably to the opinion of the pilots in thoſe ſeas, who all declare that the ſea ſets into the gulph of Canada by the ſtreight betwixt cape Roze, the moſt weſtern point of the iſland of Newfoundland, and the north cape in the iſle Royale; and diſcharges itſelf by the ſtreight of Beliſle, formed by the main land and the north point of Newfoundland: and we ſenſibly found on making the coaſt, that the waters carried the ſhip northward.

ON the 12th of Auguſt in the morning, we ſaw a great number of thoſe kinds of ſea-fowl which always keep near the ſhore, and particularly ſeveral gulls, from which with the courſe we had ſteered from the time of our coming into ſoundings on the 2d of Auguſt, we concluded ourſelves to be not far from land, having alſo diminiſhed our longitude exactly 11 degrees. In this conjecture we were ſoon confirmed by weeds, pieces of wood and boughs floating on the water, and at twelve o'clock we actually made the land, though at a great diſtance. At four o'clock in the afternoon we had a plain ſight of it; but being low and level we were obliged to ſhorten ſail and lie to, till the following day, when at half an hour after ſix in the

morning, we saw the island of Escatari, which lies about five leagues north of Louisburgh: but the wind continuing S. W. and the current setting the ship northward, we were obliged to work up towards the harbour.

On the 13th, at six in the morning, we saw a brigantine plying along the coast for Louisburgh; the Delivrance on this hoisted a French ensign, which was answered by the other, firing two or three guns. This gave us no manner of uneasiness, concluding that the brigantine suspecting some deceit in our colours, had fired those guns as a warning to the fishing barks without, to get into the harbour; and they put the same construction on this firing, immediately shewing the greatest hurry in making for a place of safety. An hour afterwards, being near eight o'clock, we saw coming out of Louisburgh two men of war, which we immediately took for ships belonging to a French squadron stationed there for the security of that important place, and that they had come out on the signal from the brigantine, that a ship had appeared in sight, lest it might be some Boston privateer, with a design on the fishery. Thus we were under no manner of anxiety, especially as they came out with French colours, and one of them had a pennant. All the forts of Louisburgh, as well as all the ships in the harbour, which we could now plainly distinguish, wore the like disguise. Here I must refer to the reader's imagination the complacency and joy which swelled every heart, imagining that we now saw the end of all our fears and disasters; a place of safe repose after a voyage of danger and fatigue. Then let the reader be pleased to think what an edge the melancholy disappointment gave to our astonishment and dejection, when amidst the indulgence of such pleasing ideas, we found our hopes destroyed, and all our visionary schemes of delight, ending in the real miseries of captivity.

We

WE were now ſo near the two ſhips which were coming out of the harbour, that orders had been given for hoiſting the boat out to go with an officer on board that which ſeemed to be the commodore; and we unloaded our guns of their ſhot to ſalute them. The ſmalleſt which carried fifty guns leading the way, came along ſide of us; then indeed from what we both heard and ſaw, our fatal diſappointment became too evident, and our misfortune was immediately confirmed to us, the ſhip hoiſting its national colours, and firing into us carried away the foretopſail halliards, that the ſail dropped down, and at the ſame time the larger ſhip came up on the ſtar-board ſide of us. Betwixt two ſuch enemies no reaſonable perſon will offer to charge the captain of the Delivrance with cowardice, that without offering any reſiſtance, which would have been a wild temerity, he immediately ſtruck his colours. The boat from the ſmalleſt ſhip came aboard and took poſſeſſion of us, having as ſhe advanced been hoiſted out for that purpoſe: and thus after firing only one gun, returned into the harbour with a very rich prize.

THIS accident gave a total change to our flattering expectations; brought ruin on our fortunes; overthrew all our ideas of the uſe and improvement of them. Our joy was ſtifled in its birth; and inſtead of our anticipated repoſe, we entered on a new ſcene of troubles and diſtreſs, aggravated by the loſs of our ſubſtance and liberty, where we had promiſed ourſelves recreation and enjoyment.

THESE two Engliſh men of war were the Sunderland, captain John Brett, of ſixty guns, and the Cheſter, captain Philip Durell, of fifty: and it was to the latter that the Delivrance ſtruck. The officers, captain Durell, for their better accommodation, ſent to the houſe which had been aſſigned him, when, purſuant to the articles of capitulation at the taking of Louiſburgh, the inhabitants were ſent back to France. This houſe

he made but little uſe of, living continually aboard the ſhip.

As to my papers, on our departure from Fernando de Norona, I had made a packet of all the plans and relations which might have been of ſervice to the enemy; alſo the Vice-roy's letters and other papers committed to my care, that on an exigency they might be ready to be ſunk. I had alſo deſired of the captain, the ſupercargo, and other officers, that in caſe it was my fate ſuddenly to fall in the action, they would do me that kind office. Accordingly, when I ſaw that there was no poſſibility either of oppoſing or getting clear of the enemy, I threw them into the water, with ſome bullets faſtened to them, to diſappoint the alertneſs of the enemy, who otherwiſe would unqueſtionably have been for laying hold of them: but my papers relating to the menſuration of the degrees of the meridian, together with the phyſical and aſtronomical obſervations and hiſtorical narratives, I kept by me, the contents being of univerſal concern, and no detriment could reſult from the enemy's knowledge of them: but as among men who ſeemed to mind nothing but what was ſilver or gold, they would have ran a great riſk of being abuſed or confounded among a multitude of others, I thought proper to acquaint the captains on what ſervice I had been, and as thoſe papers tended to the improvement of navigation, took the liberty of recommending them to their favour: upon which, after having looked on them with ſome attention, they laid them aſide, and carried them afterwards to the commander of the ſquadron, with whom they remained, till, together with myſelf, they were ſent to England.

CHAP.

CHAP. VI.

Don GEORGE JUAN's *Voyage from* LA CONCEPTION *to* GUARICO *in the Iſland of* SAN DOMINGO; *and from thence to* BREST *in* FRANCE, *together with his return to* MADRID.

THE frigate la Lys, having on the fifth of February, parted company from the three others, on account of her making ſix inches water every hour, which would naturally increaſe by the working of the ſhip, ſteered directly for Valparaiſo, where making all poſſible diſpatch in careening and watering, on the firſt of March ſhe was ready to put to ſea. The winds, as is uſual at that ſeaſon, being at S. and S. W. the Lys was obliged to ſtand to the northward of the iſland of Juan Fernandes; and drive till ſhe was in the latitude of 32 deg. 18 min. where ſhe fell in with a wind at S. E. which carried her to the latitude of 35 deg. and 11 min. weſt of the meridian of Valparaiſo; here it ſhifted to the S. W. and thence along the N. W. quarter to the N. in which time the Lys only got into the latitude of 36° 30′ being the 17th day of the month. Here the wind veered to the S. and S. W. blowing very hard, which cauſed ſuch a ſea that they were obliged to lie to under their main-ſail. On the 18th, though the violence of the wind abated, it continued in the ſame point; afterwards it changed to the W. and N. W. where it continued till the ſhip came into 40° 30′ latitude, ſtill keeping the ſame longitude of 11°. Here ſhe met with a ſecond hard gale at ſouth, which they weathered in the ſame manner, till it abated, ſhifting immediately to the S. W. weſt, and N. W.

On the 25th, in the latitude of 46 degrees, they met with a ſtorm at W. which obliged them to lie to under a reefed mainſail. After its greateſt violence was ſpent, till the fourth of April, when they found themſelves in 58° latitude and 1 eaſt longitude from Valparaiſo, the firſt meridian for the courſe of the voyage, the wind ſhifted from S. to S. W. W. and N. varying alſo in its force; and the ſhip carrying ſail accordingly.

On the tenth, in the latitude of 55 and 18° eaſt of Valparaiſo, they were ſurprized with a hard gale of wind at S. and S. E. which obliged them to run under their courſes. The force of the wind indeed was not ſo great as in the two gales beforementioned; but was much more troubleſome, being attended with very thick ſnow, and the cold intenſe. The wind abating ſhifted to the S. W. W. and N. W. whilſt the ſhip paſſing eaſt of Staten land, on the 26th was in the lat. of 34° and long. 32 and 30′. Here they fell in with winds at E. and S. E. which indeed are the briſas or general winds.

The ſlow progreſs of the voyage, and the heavineſs of the frigate, which even in the moſt favourable weather, never went above ſeven miles an hour, gave room to apprehend, that it would be impoſſible to reach the coaſt of Spain, without putting in to ſome harbour for a freſh ſupply of proviſions; the captain therefore repreſented to the ſupercargo, that no place could be more proper for ſuch a purpoſe than Monte-Video, being a Spaniſh port; and that if they paſſed it, they ſhould be obliged to make uſe of one belonging to ſome foreign power. But he, conformably to the preciſe order of the regiſter againſt putting into any harbour, unleſs on the coaſt of Spain, could not be prevailed upon to comply with the captain's propoſal; and accordingly the courſe was purſued without alteration.

The

THE winds continued at S. E. E. ſometimes at S. and S. W. with heavy rains, thunder and lightning, till the frigate came into 23° of latitude, and 39 of longitude.

ON the 12th of May, at one in the morning, they diſcovered a ſmall frigate to leeward; and on the 19th being in 10° 30′ S. latitude and 39 E. longitude, ſaw three large ſhips: but both ſides continued their reſpective courſe, without making any motion to avoid or approach each other.

ON the 27th they croſſed the line, 44° eaſt of Valparaiſo, or 30° 30′ W. of Paris. As theſe parts abound in ſharks, they caught ſeveral, and one of them, after opening it and taking out its entrails, heart, and lungs, they threw it again into the water; and it being calm they ſaw it ſwim near the frigate above a quarter of an hour, till floating out of ſight they could not ſee the death of the creature. The heart alſo of this and many others on which the ſame experiment was tried, was obſerved to have a motion on board the ſhip for above a quarter of an hour.

ON the firſt of June the frigate was in 4° 30′ N. lat. the wind N. E. and S. E. and ſometimes at S. and S. W. with heavy rains; but now the proviſions, and particularly water growing ſhort, the captain, with the approbation of his officers and paſſengers, determined to put in at Martinico, and accordingly the courſe was directed thither.

ON the 11th in the morning, being in the latitude of 9 deg. 30 min. and 39 deg. eaſt of Valparaiſo, they had ſight of three large ſhips which continued their courſe without ſtanding for the frigate; and as their courſes were directly oppoſite, they ſoon loſt ſight of each other.

ON the 21ſt at night, they had a ſhort ſquall rather of rain than wind, but the night being dark, they ſaw at the top-gallant-maſt head, the meteor called by the

ſailors San Telmo, which laſted ſix hours. Some imagine this meteor to be a ſign of fair weather; but this opinion is as little to be relied on as many others adopted without reflection, and juſtly called vulgar errors: it is only a natural phænomenon, more particularly ſeen in nitrous and damp places of the earth, in church-yards and the like, and on the ſea it proceeds from the ſame cauſe; and though it moſt commonly makes its appearance in ſtormy weather, the agitation of the waves ſending forth a greater quantity of nitrous particles, and being more copiouſly carried up to a greater height, by the force of the winds, the luminous matter ſettles at the extremity of the maſts or yards by a ſmall part of it, whilſt the remainder has the appearance of a flame in the air: yet it is not very uncommon to ſee this meteor in fair eaſy weather: and this was the caſe here, it being quite calm; and in the Delivrance on the ninth of Auguſt, at half an hour after one in the morning, and in 28° 40′ S. lat. we ſaw one of theſe kinds of lights, and on the ſame part of the maſt; but ours only laſted an hour, the wind at that time was but faint; and this alſo had been preceded by hard violent ſhowers attended with ſome wind; and the atmoſphere every where covered with a thick cloud. In both inſtances no tempeſt happened before or ſoon after; conſequently they concurred to confute and explode the falſe notions of ſailors, who are poſſeſſed with a belief of certain conſequences being preſaged by theſe lights, according to their ſituation, the part of the ſea and the time; and may likewiſe undeceive thoſe, who too eaſily ſwimming with the ſtream of vulgar opinions, are fond of turning the fortuitous effects and products of nature into ominous myſteries.

On the 15th, in the long. of 13° 30′ they ſaw great numbers of birds, which in their opinion indicated that land was not far off, and accordingly lay to all

that night, and the following: but fearing that ſome Engliſh privateers might be cruiſing to windward of Martinico, in order to avoid them the Lys ſteered for the iſland of Tobago, intending to go directly from thence to Martinico. On the 28th the colour of the water became totally changed, ſo as to reſemble that of a turbid river; which they attributed to the iſſue of the Oronoco, though the mouth of that river is betwixt ſixty and ſeventy leagues diſtant; lying to in the night they ſounded and found ſixty fathom water, and a muddy bottom.

ON the 29th, at half an hour after ſeven in the morning, they made the iſland of Tobago lying weſtward: and at noon ſaw the little iſland of San Gil, diſtant about two leagues from the N. E. from the former: it bore S. three leagues and a half or four leagues off; and the latitude obſerved at the ſame hour, was 11°, 36′. According to the obſervations of longitude taken at Valparaiſo and Martinico, deducting from them that of the iſland of Tobago, the error in Don George Juan's eſtimate was only thirty-five leagues, which may rather be termed an inaccuracy, being abundantly ſufficient for, or at leaſt, it was of a ſufficient juſtneſs in a voyage of ſuch a length; and from it I conclude that they met with no currents about Cape Horn; though not above a month before, when the Delivrance ſailed round the Cape, we found them very ſtrong; and conſequently they muſt ſoon after ceaſe. The ſame change was obſervable in the weather, and this partly occaſioned that of the currents, for though the wind was at S. E. during that part of our voyage, yet it was not conſtantly there, nor had we any of thoſe hard gales which the Lys met with: an evident proof that thoſe winds already prevailed there; and thus checked the courſe of the waters, keeping them in their eaſtern ſituation.

FROM

From the iſland of Tobago, they continued their courſe to Martinico, and in order to this ſteered all the night of the 20th betwixt the iſland of Barbadoes and St. Vincent. On the 30th, when they imagined themſelves betwixt thoſe iſlands, having ſteered N. one quarter northerly, they had no ſight of any land. On the firſt of July they were in 14°, 30′ lat. and by eſtimate a degree weſt of Tobago: and thus the frigate ſhould have been not far from the iſland and to windward of Martinico; but they ſtill were out of ſight of all land. So great a difference in the ſhort time of two days ſail was conjectured to proceed from currents; but the greateſt perplexity was to determine whether they ſet to the eaſt or weſt. This doubt, however, was removed by conſidering that it was impoſſible they could have paſſed through the knot of iſlands, from Granada to Martinico, without ſeeing at leaſt one of them, even if it had been in the night time, as beſides their magnitude, the great concern they were under of meeting the enemy, cauſed them to keep a very careful look out. It was therefore concluded that the frigate could not be to the weſt of Martinico, but that the currents had drove her to the eaſtward. Accordingly they ſteered S. W. one quarter weſterly, in order to fall in with it; and after ſailing thus thirty leagues without making any land, other reflections aroſe, though ſtill with ſome apprehenſion that they were to the weſt of Martinico; and now the courſe was altered to north, without knowing the place where the ſhip actually was, in order to avoid the danger, that if ſhe was on the weſt ſide, by ſteering as the day before ſhe would fall to leeward of the harbours of Puerto-Rico or St. Domingo; and thus find it extremely difficult to reach any port. The wind was at E. N. E. and keeping as cloſe to it as poſſible, on the fourth at half an hour after three in the afternoon, they made the

the middle part of the iſland of Puerto-Rico. This was a tranſporting ſight to all, as having before their eyes a ſecure and plentiful port: and having happily eſcaped the dangers of the Granadillas, a knot of iſlands where the greateſt channel is but three or four leagues broad, the currents having very providentially carried the ſhip through the midſt of them, clear of the rocks, which on both ſides have proved fatal to many veſſels: and they had not ſo much as any ſight of land. By Don George Juan's eſtimate he found that they might when they ſteered betwixt the iſlands of Barbadoes and St. Vincent, the currents had carried them almoſt forty-two leagues to the weſt: and though they all very well knew that the courſe of the waters in that part of the neighbourhood of Martinico ſets weſtward, they were at a loſs to conceive how they had paſſed betwixt thoſe iſlands without having ſight of any one, they lying ſo near one another, the night being clear, and every one keeping a good look out.

ON the night of the fourth day, they ſometimes lay to, and ſometimes made an eaſy ſail, in order to get into the channel betwixt the iſlands of Puerto-Rico and St. Domingo, intending for Guarico, otherwiſe called cape Francois. On the 5th at ſix in the morning, the S. W. point of the iſland of Puerto-Rico bore N. at about four leagues diſtance: and ſtanding towards it till within the diſtance of only two leagues, they could very plainly ſee the bottom, which was ſtony; and on ſounding found ſeven fathom water. On this they tacked to the weſt, and continuing in this direction about two hours, they had always the ſame depth of ſeven fathom, but coming into twenty they returned to their former courſe.

AT eleven in the forenoon they diſcovered to leeward two large ſhips: and apprehending they might belong to the enemy, the frigate tacked: on which they alſo did the ſame, and crowded ſail. At noon

the

the latitude by obſervation, was 8°, 7′, and the iſland of Deſecheo bore N. one quarter weſterly, diſtant five leagues. The two privateers, for ſuch it is believed they were, lay becalmed; and this enabled the Lys to keep at the ſame diſtance as when ſhe firſt diſcovered them; and the wind freſhening to the N. about ſun-ſet, ſhe ſtood E. N. E. in order to get cloſe to the ſhore, and thus avoid the two ſuppoſed privateers; determined however to make a ſtout reſiſtance, if they ſhould be obliged to come to that extremity. Afterwards the wind ſhifted to E. N. E. and the privateers continuing S. W. the Lys ſteered northward and weathered the iſland of Deſecheo about two leagues. The wind afterwards freſhened, and at eleven at night the Lys ſpread all the canvas poſſible, ſteering N. W. and by the 6th in the morning, had neither ſight of the land nor the privateers.

On the 7th at ſix in the morning they made old cape Francois five leagues diſtance: they kept in with the coaſt, and at noon by obſervation found the latitude 19°, 55′, from which they concluded that of the cape to be about 19°, 40′, and though the land which projects into the ſea be low, the inland parts appear very mountainous.

On the 8th at ſix in the morning, cape la Grange bore S. diſtant five leagues; and by noon the frigate being within three leagues of cape Francois harbour, lay to with a ſignal for a pilot, who being come aboard, carried the Lys into the harbour, where ſhe anchored at two in the afternoon, in eight fathom water and a muddy bottom; about a quarter of a league diſtant from the town.

Variations of the needle obſerved during the whole courſe of the voyage, the longitude being taken from the Meridian of Valparaiſo.

Latitude.

Latitude.			Longitude.			Variations.		
D.	M.		D.	M.		D.	M.	
48	45	South	10	30	West	14	30	E.
57	15		9	30	East	24	30	
49	30		23	30		19	0	
40	0		27	30		14	0	
38	15		29	0		12	30	
37	15		30	0		12	0	
36	15		30	45		11	0	
35	0		31	40		10	30	
33	25		33	30		9	0	
27	0		36	15		4	0	
22	15		38	45		2	0	
15	30		37	0		1	30	
7	30		41	0		0	0	
1	15		43	15		2	15	W.
0	0		44	0		3	30	
9	30	N.	38	30		1	30	
11	15		28	0		1	0	
11	15		14	0		4	0	E.
In cape Francois or Guarico						5	15	

THE frigate arrived at the harbour of Guarico in the moſt favourable time, five men of war being then at Leogan, another harbour in that iſland belonging to the French, and expected there in order to convoy a fleet of merchantmen to Europe.

GUARICO lies on the N. W. ſide of the iſland of Saint Domingo in 19 deg. 45 min. 48 ſec. N. latitude, and 73 deg. 0 min. 45 ſec. weſt of the meridian of Paris, according to the obſervation of Don George Juan taken on the ſpot: the town is about one third of a league in length, and contains between thirteen and fifteen hundred inhabitants, who are a mixture of Europeans, white creols, negroes, mulattoes and caſts; but the laſt the moſt numerous. It is but a few years ſince that all the houſes in the town were of wood; but the greateſt part of them having been conſumed by the unextinguiſhable rapidity of a fire,

the

the greateſt part of them have ſince been built of ſtone. They all have only a ground floor, except here and there one with a ſtory. Beſides the pariſh church, which adds an ornament to the ſquare where it ſtands, here is a college of Jeſuits, who have the care of the ſpiritual concerns of the inhabitants, and diſcharge it with exemplary affection and ſedulity. Indeed at the firſt ſettlement of the French here, the prieſts were capuchins; but the latter being either unable to bear the climate, or not bleſſed with a ſufficient ſtock of patience to reconcile themſelves to it, forſook the churches, on which the Jeſuits took charge of them. Here is alſo a nunnery of Urſelines recently founded, and a convent of religious of San Juan de Dios. About three quarters of a league from the town is an hoſpital, remarkably ſpacious and beautiful, and which receives all patients who apply for admittance. The pariſh church, though a handſome building, has not yet recovered the damages it ſuſtained at the fire. The college of Jeſuits is a moſt elegant ſtructure in every reſpect; and though not large, is ſufficient for the conveniency of the fathers generally reſiding in it, which never exceed ſix. The nunnery is of greater extent; but by the king's order that the increaſe of the town may not be obſtructed, no young women natives of the country are allowed to take the veil, ſo that it can only be conſidered as a place of genteel and regular education, till they are of age to enter on another ſtate.

The town lies open without any other defence than a ſingle rampart, two batteries on the ſea-ſide, and a little fort on the point of Puolet for defending the entrance of the harbour, at about two thirds of a league from the town. The regular garriſon both for it and the place itſelf conſiſts partly of French and partly Switzers, beſides a numerous and complete body of militia formed of all the inhabitants capable of bearing arms, who are diſciplined, and

and on the ſame footing as the regulars; jointly with whom; the better to fit them for ſervice on any emergency, they mount guard and perform all other military duties. No country can be better cultivated than the neighbourhood of cape Francois. There is not a ſpot of ground capable of bearing any thing, but is ſown with the moſt proper ſpecies of grain. And by theſe farms or habitations, as they are generally called, where the ſervile work is all done by negroes, the people ſubſiſt in comfort and even in affluence; being enabled to ſend vaſt returns to France for the European commodities brought hither. The grounds belonging to theſe habitations are laid out in plantations of ſugar, indigo, tobacco, and coffee, the joint produce of which is ſo large that 30,000 tons are annually exported to France; and this vaſt quantity only from the territories of cape Francois; that it may be conceived how immenſe the produce would be, were all the country which the French poſſeſs in this iſland cultivated. The contraſt of this with the little advantage drawn from the remaining part of it, which though even more fertile, cannot maintain itſelf, a ſupply being every year ſent for the ſubſiſtence of the garriſon and eccleſiaſticks, ſtrongly ſhews the advantages accruing to a country from ſkill and induſtry.

The large fleet of ſhips which frequent the ports of this colony, are ſo plentifully ſupplied with European products and manufactures, that at all times, and eſpecially in time of peace, they enjoy a plenty of every thing; excellent bread made of wheat brought from France, wines, diſtilled liquors and fruits of all kinds. The only article of proviſions the inhabitants are obliged to procure from the Spaniards is meat, in return for which they ſupply them with linen, and other European goods. This commerce is indeed prohibited: but the want being reciprocal, it is carried on with as little ſecrecy and diſguiſe, as if it had the

the ſanction of the laws. For as no regiſter ſhip goes from Spain to St. Domingo, the iſland, for want of a due culture of the lands, being incapable of making any returns, the colony muſt neceſſarily periſh, unleſs ſupplied with goods from the neighbouring plantations.

There cannot be a more convincing proof of the vaſt commerce carried on by France through the channel of this colony, than the number of ſhips which come annually to its different ports: no leſs than one hundred and ſixty ſmall and great, that is, from one hundred and fifty to four or five hundred tons, come to Guarico; and this may ſerve to give ſome idea of thoſe deſtined to Leogane and Petit Guave, and others of leſs note: all theſe ſhips come loaded with goods and proviſions, and every one returns with at leaſt 30 or 40,000 dollars in ſilver, or gold. Thoſe only which go from Guarico, excluſive of the cargo which conſiſts of the products of the colony, carry to France every year half a million of dollars; and the ſame computation, which is not in the leaſt improbable, being made for each of the other two chief ports, and as much for all the other ſmaller ports, the total will be two millions of dollars per annum: and this was preciſely the ſum carried in the fleet which the Lys had the good fortune to join with in her return.

It is eaſily conceived that not one fourth part of the cargo of ſo many ſhips can be conſumed in this colony and its dependencies; and conſequently it muſt find a vent among the Spaniſh ſettlements, as the Havanna, Caraca's, Santa Martha, Carthagena, Terra Firma, Nicaragua and Honduras. Accordingly Spaniſh barks put into the little bays and creeks near Guarico, and carry on this clandeſtine commerce, when by regiſter they are authorized to go to the ports permitted.

The

THE climate of Guarico is extremely hot, which equally proceeds from the country being every where mountainous, and from its proximity to the line; ſo that perſons who come there only occaſionally, on the leaſt exceſs in diet or other circumſtances, ſeldom eſcape being attacked by diſtempers, which in three or four days carry them off; particularly great numbers of the ſhips' crews are ſwept away after extreme pains, the continual labour theſe unhappy people are obliged to go through in unloading and loading, taking in water and other neceſſary ſervices of the ſhip, expoſing them to all the violence of ſuch diſtempers. The malignant fevers and dyſenteries are of the ſame kind as thoſe ſo fatal at Porto-bello: and a ſufficient account being given of the temperature, the inconveniences accompanying it, and of the products of countries ſimilar to this, I may here be excuſed from dwelling any farther on thoſe ſubjects.

THE cuſtoms, genius, and manners of the people here are no leſs different from the European French, than thoſe of the Spaniſh Creoles in this part of America are from the real Spaniards. Here are ſome perſons of very great fortune, and all acquired from the cultivation and improvement of their lands: and all live in eaſe and happineſs, labouring under very few inconveniences either natural or political; and this is not the leaſt cauſe of its daily increaſe: beſides, the people ſettled here are of themſelves laborious, frugal, inventive, and continually exerting themſelves in making new improvements; a turn of mind pregnant with ſo many advantages, that I wiſh it could raiſe a ſuitable imitation in the Spaniards, that by labour and induſtry they might attain that proſperity, they ſee their neighbours the French have done.

THE harbour, though open to the eaſt and north winds, is very ſecure, being partly incloſed by a ridge

rocks which fence it againſt the impetuoſity of the ſea. The chief inconveniency is, that when the breeze blows ſtrong, it is extremely difficult and dangerous for boats to land; for thoſe winds, eſpecially at E. N. E. ſweep along the whole harbour.

At the end of the month of Auguſt, the French ſquadron under Mr. Deſturbier de l'Etanduere, which had been expected from Leogane, came into the harbour of Cape François; it conſiſted of the following five ſhips:

Le Juſte, the commodore, of	—	70 guns
L'Alcide	—	70
L'Ardent	—	60
Le Caribou	—	50
La Mutine	—	26

Several merchant ſhips bound for Europe, took the advantage of ſailing with this convoy; and on the 6th of September, the whole fleet put to ſea to, the number of fifty-three ſail, including the men of war, frigates, brigantines, and bilanders. At ſun-ſet Picolet-point bore S. 5° W. diſtance four leagues and a half. The 7th they ſteered for Caycos, and not getting ſight of theſe iſlands during the day, it was thought adviſeable to lay to all night: but on the 8th at eight in the morning they ſaw the Cayco-grande, an iſland of ſand three leagues in length, N. and S. but appears the more conſpicuous from a few buſhes growing on it. At noon its ſouth point bore S. E. $\frac{1}{4}$ ſoutherly diſtant two leagues and an half. By the latitude they obſerved, that of the iſland was ſet down at 21° 35′ and by the courſe its longitude determined to be the ſame with that of Cape François, unleſs the current of the waters, which was perceived to ſet to the northward, may be ſuppoſed to have occaſioned ſome ſmall error.

The frequent danger which the merchant ſhips were in of running foul of each other, and the retardment

tardment occaſioned by ſuch confuſion, had induced them to divide themſelves, ſome going to windward and others to leeward of the men of war. But this was a conveniency which they were not long permitted to enjoy, a privateer of the enemy appearing in ſight to windward of the fleet: and on this the commodore ordered his ſquadron to form into a line; and the merchant ſhips to run to leeward of him, and keep at a proper diſtance. The currents towards the north continued with greater force on the 10th, 11th, and 12th; and during theſe days, the winds ſhifted from E. S. E. to N.

ON the 13th, the fleet coming into lat. 27° 30′, the force of the currents, which had hitherto been obſerved, now entirely decreaſed; the privateer did not fail to come in ſight of the fleet every morning; and towards night of drawing nearer, with a view of carrying off a prize: but in the day time ſhe kept out of ſight. On the 15th in the morning ſhe was ſeen ſo near, that the commodore made a ſignal for two ſhips to chace. But being a ſhip very fit for the ſervice ſhe was employed in, the men of war ſoon loſt ſight of her. The winds continued at E. and S. E. but no more currents were perceivable.

ON the 17th, in 31° of lat. and 3° 14′ E. of the meridian of Cape Francois, the wind ſhifted to N. and N. N. E. with freſh gales and ſhowers; the fleet ſtood to the eaſt; but the ſea running high, they drove to 28° 44′ lat. as was obſerved on the 23d, and 8° 40′ long. Here the winds came about to the N. W. and they began to ſteer N. E. one quarter northerly.

ON the 25th, the wind veered to the S. E. and S. with fair weather; and freſhening veered to the S. S. W. S. W. and W. the courſe of the fleet was N. E. one quarter E. and E. N. E. till the 27th of October, when they made Cape Prior on the coaſt of Gallicia;

and at five in the evening Cape Ortegal, bearing S. S. E. distance seven leagues.

Don George Juan, by his reckoning, concluded the difference of longitude between Cape Francois and Cape Prior to be 59° 30′ which is however considerably different from the real longitude: but this I attribute to the strong tendency of the currents eastward at the mouth of the Caycos channel.

When the weather permitted, he continued the observations of the variation of the needle; and taking his meridian from the point of departure, which was Cape Francois, they proved as follows:

N. Latitude.	Longitude from Cape Francois.	Variations.
D. M.	D. M.	D. M.
30 00	2 00	1 30 E.
29 00	6 40	1 00
29 00	9 15	0 00
33 00	11 40	1 30 W.
36 22	18 30	7 00
40 00	26 00	11 00

On making Cape Ortegal, the course was altered to N. N. E. and on the 31st, at seven in the morning, the squadron had again sight of land, which proved that of Brest-bay; and at three in the afternoon, the whole fleet came to an anchor in that harbour.

Don George Juan being thus landed in France, embraced with pleasure this opportunity of paying his respects to so illustrious a body as the royal academy of sciences; at the same time communicating several particulars relating to our operations in Peru; together with some observations concerning the aberration of light, and its effect on the fixed stars, according to his own accurate observations in the province of Quito. And that celebrated body were pleased to express their esteem of his application and knowledge, by

by admitting him a correſponding member. Having thus honourably terminated all his buſineſs at Paris, he ſet out for Madrid, in order to lay before the miniſtry the event and ſucceſs of his commiſſion; and at the ſame time ſolicited that a report of it might be made to his majeſty.

CHAP. VII.

Account of the harbour and town of LOUISBOURG; *and the taking of it by the* ENGLISH; *together with ſome particulars relating to the* French *fiſhery, and the trade carried on there.*

LOUISBOURG is in the latitude of 45° 50′ N. lat. and 61° W. of the meridian of Paris. It ſtands in the S. E. part of l'Iſle Royale, and E. of Cape Breton. The town is of a middling ſize, the houſes of wood on a foundation of ſtone to the height of two yards or two yards and a half from the ground. In ſome houſes the whole ground floor is of ſtone, and the ſtories of wood. It is walled, and extremely well fortified with all the modern works: it is only in one place about 100 toiſes in length, where the wall is diſcontinued, as indeed unneceſſary, this being filled up by the ſea, and ſufficiently defended by a palliſade. Here the water forms a kind of a large lake; but where the ſmalleſt barks cannot come, and the large ſhips muſt keep at a conſiderable diſtance, by reaſon of rocks and ſhoals; beſides there are two collateral baſtions, which flank this paſſage to a very great advantage. Within the fort, and in the center of one of its chief baſtions, is a ſtrong building with a moat on the ſide towards the town; and this is called the citadel, though it has neither artillery, nor is of

a ſtructure for receiving any; the entrance to it is indeed over a draw-bridge, on one ſide of which is a corps de garde, and advanced centinels on the other. Within this building is the apartment for the governor, the barracks for the garriſon, an arſenal, and under the platform of the redoubt, a magazine, always well furniſhed with military ſtores. The pariſh church, or rather chapel, which ſerved as ſuch, alſo ſtood within this citadel, and without it was another belonging to the hoſpital of St. Jean de Dieu, which is an elegant and ſpacious ſtructure all of ſtone, though founded long ſince.

The harbour is large and ſafe; but the entrance very narrow, being confined by an iſland called Goat iſland, on which ſtands a pretty large fort; and on the oppoſite ſide is a very high tower which ſerves as a light-houſe. The coaſt on this ſide within forms a point, which advances towards the ſhore till it faces the mouth of the harbour. Here alſo is a large fortification called the royal battery, being that which defends the entrance of the harbour, and the fort on that ſide. From this fort the coaſt winds inward, and forms a large bay, which ſerves as an excellent careening place for veſſels of any burden, having a good depth of water, and being in a great meaſure land-locked: and as ſuch the country veſſels lay up here in winter. In ſummer they all come to an anchor before the town at about a quarter of a league diſtance, though the ſmaller veſſels may come within a cable's length of the ſhore, where they lie quiet from all winds except the eaſt, which blows right into the harbour's mouth, and cauſes ſome agitation; but without any danger to the ſhips at anchor in it.

Betwixt the royal battery point and that of the light-houſe, but nearer to the former, lies a ſand always above water; but every where elſe the harbour is clear, ſo that ſhips may tack with the greateſt ſafety in going out or coming in when the wind is not

fair. In winter, however, this harbour is totally impracticable, being entirely frozen ſo as to be walked over; that ſeaſon begins here at the end of November, and laſts till May or June; ſometimes the froſts ſet in ſooner, and are more intenſe, as in the year 1745; when, by the middle of October, a great part of the harbour was already frozen.

THE inhabitants of Louiſbourg, which at that time was the only town in the iſland, conſiſted of French families, ſome Europeans, and others Creoles, of the place itſelf, and from Placentia in the iſland of Newfoundland, from whence they removed hither on the ceding of that iſland to the crown of Great Britain. Their principal if not only trade is the cod-fiſhery, from which alſo large profits accrued to them, not only on account of the abundance of this fiſh, but that the neighbouring ſea affords the beſt of any about Newfoundland. The wealth of the inhabitants conſiſted in their ſtorehouſes, ſome of which were within the fort, and others ſcattered along the ſhore, and in their number of fiſhing barks; and of theſe more than one inhabitant maintained forty or fifty, which daily went on this fiſhery, carrying three or four men each, who received a ſettled ſalary, but were at the ſame time obliged to deliver a certain number of ſtandard fiſh; ſo that the cod ſtorehouſes never failed of being filled againſt the time the ſhips reſorted hither from moſt of the ports of France, laden with proviſions and other goods, with which the inhabitants provided themſelves in exchange for this fiſh; or conſigned it to be ſold in France on their own account; likewiſe veſſels from the French colonies of St. Domingo and Martinico, brought ſugar, tobacco, coffee, rum, &c. and returned loaded with cod; and any ſurplus, after Louiſbourg was ſupplied found a vent in Canada, where the return was made in beaver ſkins and other kinds of fine furs. Thus Louiſbourg, with no other fund than the fiſhery,

carried on a continual and large commerce both with Europe and America. Louiſbourg was not, however, the only port where the French veſſels loaded with cod, greater numbers going themſelves to fiſh at Newfoundland, off the coaſt of Petit Norde, and on the bank, as will be more particularly ſeen in the ſequel. Beſides the inhabitants of Louiſbourg, great numbers of French were ſettled along the coaſt of the neighbouring iſlands, particularly that of St. John, where beſides their dwellings they had ſtore-houſes and all the appurtenances of a fiſhery; which being the moſt profitable occupation, and the gain leſs uncertain, very few applied themſelves to the cultivation of the country: indeed, its being in winter covered with ſnow, ſometimes to the depth of three or four feet; and even not diſſolved till ſummer was pretty far advanced, huſbandry ſeemed to want a requiſite time for the products to attain their proper maturity. Nor could any conſiderable graziery be followed here, being obliged for the ſupport of the few cattle they had, to lay up a winter's ſtock of hay, and to keep them houſed all that ſeaſon, till the ſummer's heat had removed the ſnow from the paſtures, the richneſs of which, in a great meaſure, compenſated for this dreary ſeaſon; and the quick growth of the corn and other products for the length and ſeverity of the winter.

In this and the adjacent iſlands were a conſiderable number of inhabitants, born in the country, or on the main land: and what is remarkable, theſe Indians not only reſemble thoſe of Peru in complexion and aſpect; there is alſo a conſiderable affinity in their manners and cuſtoms; the only viſible difference is in ſtature, and this advantage lies viſibly on the ſide of the inhabitants of theſe northern climates.

These natives, whom the French term ſavages, were not abſolutely ſubjects of the king of France, nor entirely independent of him. They acknowledged him

him lord of the country, but without any alteration in their way of living; or ſubmitting themſelves to his laws; and ſo far were they from paying any tribute, that they received annually from France a quantity of apparel, gunpowder, and muſkets, brandy, and ſeveral kinds of tools, in order to keep them quiet and attached to the French intereſt: and this has alſo been the politic practice of that crown with regard to the ſavages of Canada. For the ſame end prieſts were ſent among them to inſtruct them in the chriſtian religion, and performing divine ſervice and all the other offices of the church, as baptiſm, burial, &c. And as the end to be anſwered was of the higheſt importance to the French commerce, the perſons choſen for theſe religious expeditions were men of parts, elocution, graceful carriage, and irreproachable lives: and accordingly they behaved with that prudence, condeſcenſion, and gentleneſs towards the Indians under their care, that beſides the univerſal veneration paid to their perſons, their converts looked upon them as their fathers; and, with all the tenderneſs of filial affection, ſhared with them what they caught in hunting, and the produce of their fields.

L'ISLE Royale had only one of theſe miſſionaries who was the Abbe Mallard; one aſſiduous perſon being ſufficient for the few Indians which inhabit this and the adjacent iſlands.

THESE Indians, like thoſe of Canada, live in migrating companies; and though chriſtians, and already formed into villages, ſtay but a ſmall time in one place: accordingly they run up their dwellings very ſlightly, knowing that they ſoon ſhall leave them. Their firſt buſineſs in a new place where they intend to ſettle ſome time, is to build a chapel and a dwelling for the prieſt; afterwards every one builds himſelf a hut, and here they remain two, three, four, ſix months, or more, according to the plenty of game

game in the neighbourhood; for this being their only ſubſiſtence, whenever it begins to grow ſcarce, they remove, and the affectionate prieſt follows them wherever they go. Many of them come voluntarily to the French ſettlements, hiring themſelves for huſbandry or any other laborious work, and at the expiration of the time agreed on, return to their countrymen. Others repair to the French ſettlements in order to diſpoſe of the ſkins of the beaſts they have killed, and furniſh themſelves with the neceſſaries they want. Thus the French live in an entire ſociality and repoſe with them, little apprehenſive of any inſurrection, or their inclination to any other government, as their own takes care to recommend itſelf to them by the moſt ingratiating meaſures; and the Indians as little harbour any ſuſpicions of a deſign in the French to erect a tyranny over them, or of making any infringements on that liberty of which they are ſo fond, or on that indolence to which they are ſo remarkably addicted, that want alone can rouſe them to action.

When the ſavages have built their huts, their firſt buſineſs is to ſcour the country, and thus they continue hunting three or four days ſucceſſively, or till they judge they have a ſufficiency to ſerve them ſome time; when they return to their huts, where they never fail of carrying to the prieſt the full amount of his quota. The ſkins of quadrupeds they reſerve for ſale, having firſt made the due offering to the prieſt, who, on the produce of them, ſupplies his own neceſſities, and likewiſe furniſhes the chapel; but its ornaments, like the veſtments of the prieſt, are neither remarkable for their number or ſplendor; their ambulatory life, among other circumſtances, ſcarce admitting of either.

Besides Louiſbourg, the only fortified harbour of this iſland, it has other places of good anchorage, on the eaſtern coaſt, which terminates at Cape Norde; and on that running ſouthward from E. to W. Of theſe, the beſt for ſecurity and largeneſs are St. Anne's bay,

bay, with a narrow entrance like that of Louiſbourg, and Cabaru bay: but theſe are all uninhabited, the French having confined their views to the fortifying of Louiſbourg; as by means of it they hoped to maintain themſelves in the poſſeſſion of the whole iſland; which being ſo very woody, that on whatever part the enemy ſhould make a deſcent, there was no acceſs to it by land; and experience has demonſtrated that they thought very juſtly, it being impoſſible, without taking the fort, to become maſters of the iſland; nor had this fort ever been taken, if ſuccoured in due time; or if, from the opinion of its being impregnable, proper precautions had not been omitted.

MOST of the trees, of which the thick foreſts of this iſland conſiſt, are pines, though not of the ſame nature with thoſe of Europe. They are of two kinds: one very fit for boards and ſuch like uſes; the other, being ſhort and knotty, is uſed for fuel or making ſhort rafters; and this is called pruche. A decoction of the ſprigs, being mixed with a little moloſſes, and fermented, makes the ale generally drank at table; the water itſelf being of ſo light and penetrating a nature, that the drinking of it always cauſes dyſenteries: but thus corrected and turned into pruche or ſpruſs beer, is found very wholeſome, and of no diſagreeable taſte.

THUS the French of theſe parts live in the greateſt tranquillity and comfort; and their happineſs might have ſtill continued had they themſelves not occaſioned the interruption of it. For though the two crowns of France and England were at war, and ſome of the ſubſtantial inhabitants here, as well as the Engliſh at Boſton, had fitted out privateers, the hoſtilities were never carried beyond the act of privateering, without any thoughts at that time of higher enterprizes. It muſt be obſerved, that before the war betwixt the two powers, at the beginning of this century, France was poſſeſſed of that peninſula and the lands called Acadia, weſt of l'Iſle Royale: but by the treaty of peace,

peace, in which France ceded to the crown of England, Placentia the capital of Newfoundland, and the whole iſland, this peninſula was alſo included, a ſuggeſtion which the court of England owed to its inhabitants, who being generally proteſtants, reaſonably promiſed themſelves more freedom under a ſovereign of their own religion. Many parts of that peninſula belonged to the inhabitants of Louiſbourg, who became deprived of them by this treaty: and among them one, concerning which there ſeems to have been a diſpute, whether it was to be included in Acadia or not. But the inhabitants ſtrongly inſiſting on the affirmative, and the king of England ſupporting their plea, France was obliged to give up the point, and conſent to its being reckoned a part of the peninſula. The owner of this parcel of land, however, who was one of the moſt conſiderable inhabitants of Louiſbourg, deſirous of recovering ſo valuable a part of his poſſeſſions, and availing himſelf of the preſent war, laid before the miniſtry of France his ſcheme for the conqueſt of it, without any charge to the king, with the allowance only of a body of troops from the garriſon; ſetting forth the great advantage which would reſult from it to the French intereſt in theſe parts. The miniſtry entered into his views; a commiſſion was ſent him for the expedition, accompanied with an order for furniſhing him with the number of regulars he had required.

The country in queſtion little apprehending any invaſion, was totally unprovided with the means of defence, ſo that after little or no reſiſtance, it was taken poſſeſſion of by the former owner, who, with the body of regulars and adventurers that had attended him, returned in triumph to Louiſbourg. In the mean time, the clamours not only of the ſufferers, who had been the immediate object of this act of violence, but of all the inhabitants of Acadia, reached the ears of the governor and other powerful perſons of Boſton,

Boſton, who, alarmed at the recent example, began to look upon their own welfare as in danger: accordingly they held conſultations on the means of preventing further miſchief, and taking ſatisfaction for the late inſult: they, with reaſon, apprehended that the French muſt carry all before them in a country like theirs, every way open, without fortreſſes or troops; and they imagined that the French, from the facility of its execution, had really formed ſuch a deſign; and that the firſt ſucceſs ſo eaſily obtained, would naturally animate that ambitious nation to greater enterprizes. This colony had ever looked upon the neighbourhood of the French as dangerous; and in order to have them at a proper diſtance, the people of Boſton had made repeated ſolicitations to the court of England, that Acadia might be delivered up to that crown, in order to form a barrier betwixt the other dominions of the two powers.

THE reaſon that the colony of New-England, and its capital, Boſton, is without any fortreſs or regular troops, is owing to the apprehenſion of its inhabitants, that they might be brought into ſubjection to the laws of England and acts of parliament, to the prejudice of thoſe liberties under which they have roſe to ſuch a height of proſperity. Thus the whole country lies open without any other defence than the great number of people it contains. The king of England ſends over a governor, but with ſuch a commiſſion as is entirely compatible with its free conſtitution. This defenceleſs ſtate of Boſton awakened in them a jealouſy of farther enterprizes from the French; that in a conſultation, at which the governor and the chief perſons of the colony aſſiſted, it was reſolved that New-England could not be ſafe by land or ſea, till the French were diſpoſſeſſed of Louiſbourg; but that in order to ſucceed, the deſign muſt be conducted with ſuch impenetrable

penetrable ſecrecy that the firſt notice of it at Louiſbourg muſt be the arrival of the fleet before it; and in Europe the account of its ſurrender: that the former might be prevented from ſending for ſuccours to Canada, and that a force might not be ſent from France ſufficient either to ſave or recover it. The governor of New-England at that time was Mr. Shirley, a gentleman of great abilities and merit; and the commodore of the men of war on that coaſt, was Mr. Peter Warren, a perſon of the like character, beſides his naval accompliſhments, and an ardent zeal for the glory of his nation; and who in this affair had the additional incentive of ſelf-intereſt, being owner of lands and houſes to a conſiderable amount; that he was looked upon as one of the moſt opulent inhabitants of Boſton. Theſe two officers, in conjuction with the chief inhabitants, determined to undertake the ſiege of Louiſbourg, the governor offering to concur in it with a body of land forces, proviſions and other neceſſaries; whilſt the commodore, who had ſignalized his courage on ſeveral occaſions, engaged with his ſquadron, though conſiſting only of three or four large ſhips and a ſmall frigate, ſo to block up the harbour, that no ſuccours ſhould be thrown into it; whilſt the land forces beſieged it in form. The greateſt difficulty was the want of regular troops, and experienced officers capable of conducting a ſiege; and the diſcipline of the ſoldiery, that there might be ſome probability of ſucceeding. This embarraſſment was removed by an expedient of Mr. Shirley's, and to which chiefly was owing the happy event of the expedition. There was a gentleman of the name of Pepperel, one of the largeſt traders in Boſton, who had a general correſpondence among the country people of the colony, both Indians and Meſtizos. He placed an entire confidence in them, and truſted them with whatever goods they wanted; and they were no leſs punctual in their

their payments at the time of their ſeveral harveſts. Theſe acts of kindneſs, and the open courteſy with which he always treated them, had endeared him to ſuch a degree, that they looked upon him as their father; and ſo ſenſible are even the rudeſt minds of diſintereſted beneficence and affability, that they on all occaſions expreſſed an unreſerved devotion to him; and no doubt was made, but they would readily ſacrifice themſelves for him at his deſire. On this confidence the governor of Boſton, propoſed to Mr. Pepperel, that he ſhould go general of this expedition; as thus all the country people would offer themſelves to go volunteers, and grudge no dangers or fatigues which they ſhould undergo in his preſence. Mr. Pepperel was not ignorant of his intereſt, and ſaw all the weight of the propoſal; but declined it, as being entirely deſtitute of that military knowledge required in much inferior poſts. At length yielding to the inſtances of the governor, and the entreaties of his acquaintance, who ſeconded the propoſal, he accepted of the poſt; and at once from merchant became a warrior. This was no ſooner made public, than multitudes of the country people flocked from all parts, deſiring to be enliſted, and impatient for the enterprize: rather from a zeal to accompany their chief protector, than for any concern about the conqueſt of Louiſbourg.

SUCH was the privacy of the enterprize, that even in England nothing of it was known till the execution. The governor had ſent notice of it to his ſovereign, but it went no further, leſt an enterprize undertaken with ſo much ſpirit, and of ſuch importance, ſhould be rendered abortive.

THUS the new raiſed troops with proviſions and military ſtores, but little ſuitable to ſuch an attempt, embarked at Boſton; and, in company with commodore Warren's ſquadron, ſailed for Louiſbourg; which

which received the firſt notice of the deſign from the appearance of the armament.

I have already mentioned that France every year ſends a remittance to Louiſbourg of money and proviſions for the payment and ſubſiſtence of the garriſon; and for the repairs and improvement of the fortifications: at which the ſoldiers themſelves, when not on guard, very gladly work as being a comfortable addition to their pay. But through covetouſneſs, one of the general vices of mankind, thoſe who were commiſſioned with the payment of the ſoldiers, and even the very officers of the garriſon, beſides wronging them in what they earned by their work, curtailed them even in their ſubſiſtence money. This was no recent evil; and on the death of the governor, the foregoing winter, the oppreſſion of the rapacious paymaſters and officers roſe to ſuch an exceſs as twice to occaſion a mutiny in the garriſon, and for want of timely lenitives, theſe reſentments contributed not a little to the loſs of the place.

The garriſon of Louiſbourg and all its forts, conſiſted only of ſix hundred French and Swiſs regulars, and eight hundred militia; formed of all the inhabitants capable of bearing arms. The governor of Canada, who was not ignorant of the diſcontented ſtate of the garriſon, and knowing that even with an unanimous zeal, it was not a ſufficient number in time of war for a place of ſuch conſequence, had, without any knowledge of what was on the carpet, offered to ſend a reinforcement to Louiſbourg. But the commandant, either apprehending that there would be no occaſion for making uſe of thoſe ſuccours, or that he judged the uſual force ſufficient for its defence, or for ſome other ſecret reaſon, thanked the governor of Canada for his offer, and told him that on any appearance of danger he would embrace it. It was not long after before he ſaw himſelf ſurrounded by the enemy; and all the ways for applying

applying for ſuccour blocked up. Thus he became beſieged in form, his forces unequal to the defence of the place; and without any probability of receiving a reinforcement either from Canada or Europe. This was the firſt, and not the leaſt error to which his diſgrace for the loſs of Louiſbourg may be imputed, as with the ſuccours offered he would have found himſelf at the head of a body of men more than ſufficient not only to defend himſelf, but to ſally out, and drive before them the raw undiſciplined multitude which were come againſt them.

THE deſign of the Engliſh having been to ſurpriſe the place when unprovided, they puſhed the enterprize with the greateſt diſpatch and vigour, that they might prevent the arrival of the annual ſupply from France: and with this view it was no later than the end of April or beginning of May, when they appeared before the town, in hopes of the double advantage, that inſtead of its reaching the French, the ſhips that brought it would fall into their hands, as it indeed happened. Another accident equally unfortunate with the former, was, that a man of war and a frigate having been fitted out at Breſt for carrying ſuccours to this place, and loaded with all kinds of military ſtores, and ready to put to ſea within two or three days, the man of war took fire, and was burnt to the water's edge. Nor was there at that time any other ſhip fit to ſupply her place, except the Vigilante, juſt on the point of launching. The captain of the ſhip which had been burnt, was the marquis de la Maiſon Forte; who alſo was appointed to command the Vigilante: and get her ready with the utmoſt expedition for the ſame voyage. This delay, however, gave an opportunity to the Engliſh of making themſelves maſters of the entrance of the harbour, and landing the troops for the ſiege, though they did not venture to open the trenches for battering in breach.

WHEN the Vigilante arrived near the coaſt of this iſland, the atmoſphere was filled with ſuch a thick fog,

that to have attempted to approach ſo near as to have a ſight of it, would have been dangerous: accordingly the marquis ſlackened ſail, and tacked till the weather ſhould clear up, that he might make the iſland without any danger. On the thirtieth of May, he diſcovered near him a frigate of forty guns, which he immediately knew to belong to the enemy; and elevated with the hopes of ſuch a capture, began to fire at the frigate, which, as had been concerted, feigned a flight; and, favoured by the fog, drew the Vigilante, which eagerly gave her chace to that part of the coaſt where the other ſhips of the Engliſh ſquadron lay: ſo that when the fog, which hitherto intercepted the ſight of diſtant objects, became diſperſed, the Vigilante found herſelf in the midſt of Mr. Warren's ſquadron. Then the frigate which had decoyed her into the ſnare, together with two men of war, the one of ſixty and the other of fifty guns, began about half an hour after one in the afternoon, to pour their fire into her, as a ſhip, whoſe ſafe arrival would have fruſtrated their enterprize. Another great diſadvantage to the Vigilante, beſides this ſuperiority was, her being ſo deeply loaded with military ſtores, hat ſhe could make no uſe of her lower tier. But neither this diſparity, nor the ſight of two other ſhips at a ſmall diſtance, could intimidate the French from making a vigorous reſiſtance till nine o'clock at night, when the ſhip being battered in every part, full of water, and her rudder ſhot away, they ſurrendered; leſt their heroic courage might have been miſconſtrued to have proceeded only from a ſavage deſpair. To this misfortune France may attribute the loſs of that important place: for the ignorance of the beſiegers, whoſe conduct ſhewed them not to have a ſingle ray of military knowledge, the vigorous reſiſtance of the forts, which they now began more and more to think impregnable, the ſmall quantity of ammunition, and the proportion of the artillery to the deſign, together with the increaſing diſguſt of theſe new-levied ruſticks, at the fatigues

fatigues and dangers of war, which had already laſted long beyond their expectations: theſe circumſtances, I ſay, had ſo diſcouraged the New-England men, that they began to repent of having left the repoſe of their plantations, for what ſome now called a romantick ſcheme; and the general inclination ſeemed to be for a return: and this being known from ſome of the Engliſh as bore none of the loweſt commiſſions, a reſolution was taken, that if they were not maſters of the place in a fortnight at fartheſt, the ſiege ſhould be raiſed. But the taking of the Vigilante diffuſed a new ſpirit through the troops: and ſeeing that by this capture they had gained a conſiderable reinforcement, and that the fort was deprived of the aſſiſtance ſo long expected, their hopes of ſucceſs revived; and they puſhed the ſiege with more vigour than even at the commencement of it.

AT the ſame time the Engliſh laid ſiege to the fort, they alſo threatened the royal battery, having a body of troops encamped on that ſide, though without ever riſking an aſſault. This battery happened to be commanded by an officer of no competent experience, and very unfit for ſuch a poſt; the garriſon alſo was weak, and it was without any guns towards the land, which was the very place facing the enemy; and conſequently the only one from whence they could be annoyed. In this exigence the commandant of the fort went over to view it and give directions; but as he could not ſpare any men, he left orders, that in caſe of the approach of the enemy on that ſide, they ſhould remove thither the guns which pointed ſeaward; and uſe them to the beſt advantage. But leſt the royal battery ſhould fall into the hands of the enemy, who would certainly turn the cannon againſt the fort, he left inſtructions with the commandant, that if he found it abſolutely neceſſary to capitulate, he ſhould with all his men, paſs over to the fort, after nailing up the artillery, ſo as to render it unſerviceable to the enemy. But the poltroon commandant of the battery availed himſelf of this inſtruction to

haſten his retreat: and, without ſtaying till he had tried the ſucceſs of his cannon on the enemy, who continued quiet in their camp; that very ſame night embarked his men, and made over to the fort in a hurry, on pretence that the enemy had made an aſſault on the battery with a large force. But the falſity of this plea was ſoon diſcovered, the French flag flying for ſome time after; an evident ſign that there was no perſon in the fort to lower it: which could not have been the caſe had the Engliſh made the pretended attack.

The enemy obſerving from their camp, that no perſon appeared as uſual on the parapet of the royal battery, concluded that the garriſon were employed on ſome ſecret attempt, or on ſome works within the fort, and therefore did not make any approaches, till queſtioning whether the French might not privately have abandoned it, a Boſton Indian (for the Engliſh army was a medley of various kinds of people) leſs fearful than the others, offered to clear up the difficulty. Accordingly, without any arms, as if diſordered in his ſenſes, he went in a rambling manner towards the gate: where, forſaken as it was, he had no great difficulty of getting into the fort; and immediately gave notice of its condition by lowering the French flag. On this ſignal the Engliſh army advanced with great alacrity to take poſſeſſion; and the artillery not having been well nailed up, was made fit for ſervice; and proved a very great detriment to the town, which it battered in flank.

All the guns of the royal battery were from 36 to 40 pounders, the Vigilante alſo carried ſome of the ſame ſize; all which the Engliſh, on being maſters of this fort, employed againſt the principal place; and under the ſhelter of theſe guns, which kept a very ſmart fire, they began their approaches, and raiſed forts for battering in breach. The place was bravely defended: but a large breach having been made, and every thing prepared for a ſtorm, it was thought proper to capitulate on honourable terms; which were readily granted by

by the Engliſh, not leſs out of eſteem for that valour which a concurrence of misfortunes had forced to yield, than from a deſire of putting an advantageous period to a ſtate of life, which had drawn them from their domeſtic concerns, and was not at all agreeable to their diſpoſition. The officers of the beſieged were not ignorant, that the moſt favourable opportunity of repelling the enemy, was to fall on them when they were beginning their works, in order to form their approaches: yet ſuch was the miſtruſt from the too recent mutinies of the regular troops, that though they themſelves made the offer, a ſally was not judged adviſeable, fearing that the ſoldiers in their preſent diſcontent, being once without the walls, would go over to the enemy, either from a dread of the puniſhments which they were conſcious their diſobedience deſerved, and would on ſome favourable opportunity be inflicted on them; or to be revenged for the oppreſſions which they had undergone from their commanders.

UNDER a combination of contrary events, and with a weak garriſon, this place held out a ſiege of ſix weeks; not ſurrendering till the end of June. By this ſucceſs England made an acquiſition of new dominions, and the colony of Boſton acquired an increaſe of territory; proſperous before throughout its large inland extent, it only wanted this iſland to command the whole coaſt: and Louiſbourg being now annexed to it, a ſhort account of this colony will not perhaps be unacceptable.

CHAP. VIII.

Of the English Colony *of* Boston, *its rise, progress, and other particulars.*

THE first settlement of the colonies of New-England, the principal province of which bears that name, and has Boston for its capital, was made in the year 1584 by Sir Walter Raleigh, though the first discovery of these coasts is not to be attributed to him; Juan Ponce de Leon, having many years before, namely in 1513, given them the name of Florida, from his discovery of them on Palm Sunday; he was soon after followed by Lucas Vazques de Ayllon, a native of Toledo, who having been driven by a tempest on the east coast of Florida, he afterwards employed an interval of fair weather, in coasting, reconnoitring, and taking draughts of its capes, rivers, and bays; at the same time landing in several parts, and quietly trading with the natives.

Raleigh took possession of this country in the name of queen Elizabeth of England, and gave it the title of Virginia, a corruption as some think from that of the chief Cacique of these parts, who was called Viginea; but others, and indeed the generality, will have it to have been in honour of his sovereign; and in allusion to that princess's invariable aversion to marriage, which would have brought her into a state of subordination; but to whoever the compliment was designed, whether to the cacique or the queen, this is the name of that part of the coast which reaches from 38 to 45 deg. of N. latitude. Raleigh began to people it with his countrymen; and he found such great numbers ready to embrace his proposals, and second any further enterprizes, that the settlement he had made, increased beyond expectation, and the country was divided into several provinces, beginning with the most

moſt northward, which lies in 45 deg. by the names of New-England, New-York, Pennſylvania, Maryland, and the moſt ſouthern retained its original name of Virginia. This laſt was the chief object of the attention of Raleigh, and afterwards of England: no meaſures were neglected for the peopling and proſperity of it. Hither particularly fled the unfortunate friends of Charles I. as an aſylum from the cruelties of Cromwell and his parliament, who, not ſatisfied with having embrued their hands in the blood of that monarch, by cauſing his head to be ſtruck off on a public ſcaffold, and by this action caſting a ſhade over the honour of the nation; now endeavoured to waſh off that horrid ſtain by the blood of others: and to palliate their tyranny, and give a colour of juſtice to their reſolutions, they pretended that all who did not conform to their pleaſure, were the king's adherents and malignants. In this dangerous ſituation, great numbers of honourable families were obliged to ſeek in other climates that ſecurity, which they could no longer enjoy in their native country.

THESE numerous emigrations not only enlarged the firſt towns in Virginia, but alſo occaſioned the building of many others. The royaliſts had made choice of Virginia preferably to any other part, as being ſure of the protection and countenance of Sir William Berkley, governor of that province, who abhorring the procedure againſt his ſovereign, maintained his loyalty unſhaken; refuſing obedience to Cromwell, and immediately declaring for the ſon of the late unfortunate monarch, as his rightful ſovereign: but though Virginia had received ſuch large additions by ſeveral vaſt emigrations of people, and though companies were erected in England for the ſupport of it, yet not receiving the neceſſaries wanted both for cultivation and defence, they had the mortification of ſeeing the province of New-York taken from them by the Dutch; who, deſirous of a ſettlement on this coaſt, twice diſ-

lodged the Engliſh, reducing them within the limits of Virginia, till a peace was concluded betwixt theſe two nations on the 19th of February, 1674.

This was not the only diſgrace attending the Engliſh in theſe parts: for as the Dutch had drove them from New-York, ſo they were diſpoſſeſſed of other countries of Florida by the Spaniards, and of Canada by the French: and though they ſtill remained maſters of a conſiderable extent of country, yet their ſettlements were not ſo ſecure, ſo well eſtabliſhed, and placed on ſo good a footing as they have been ſince. This partly aroſe from the diſcovery of a tract of land betwixt New-York and Virginia; the ſoil ſo fertile, and the temperature ſo mild, that it was thought the peopling of it would be attended with greater advantages than that of any other of their colonies. This diſcovery, with the particulars, was fortunately publiſhed in England, at a time when ſevere perſecutions were carrying on againſt the Quakers, a ſect newly ſprung up, and which, like primitive chriſtianity, increaſed the more it was perſecuted, that now it numbered amongſt its members ſeveral perſons of a more elevated rank and greater abilities than its founders. Among theſe was one William Penn, who, both on account of his parents and his perſonal qualities, was univerſally eſteemed. To him Charles II. made a grant of the province, that he might withdraw thither with all his ſect; as thus it would become totally extinguiſhed, and policy hoped to accompliſh that by indulgence, which it had in vain attempted by rigour.

This grant was made to William Penn in the year 1681; though others date it from the year 1682. However, he ſet out with a numerous and well-provided company; and began to people the province which had been granted him, calling it Pennſylvania, from his own name, and the woodineſs of the country. In order to increaſe his numbers, and ſecure their ſtay by the ſtrongeſt ties, he made one of the fundamental laws

laws of his colony, a general toleration, by which all who followed the precepts of morality, ſhould enjoy the free exerciſe of their religion, without moleſtation; which, with other privileges and immunities granted to the ſettlers, had ſuch good conſequences, that induſtrious perſons flocked thither from ſeveral parts, particularly the French refugees from England. The number of families increaſed in a ſhort time to ſuch a ſurprizing degree, that the firſt territory not being ſufficient for them, they ſpread themſelves along the neighbouring colonies on the coaſt; where their deſcendants ſtill continue. To theſe are owing the commencement and riſe of the town of Boſton, which, by the deſcription I have from many who have been there, may, for extent, wealth, and handſome buildings, vie with ſome of the moſt flouriſhing in Europe: nor is this the only place in ſuch happy circumſtances. Beſides the many towns on the coaſts, the inland parts, to the diſtance of one hundred leagues and more, alſo make a chearful appearance, being diverſified with large towns, villages, ſeats, and plantations. Thus, from the exuberant fertility of the country and the induſtry of the people, the nation reaps an immenſe benefit.

THE reſort of ſo many nations, which compoſe the inhabitants of New-England and the other provinces, renders them ſo populous and wealthy, that a conſiderable kingdom might be formed of them: for though its extent along the coaſt be not very large in compariſon of others in America, this deficiency is compenſated by its inland diſtance, and the great number of people it contains. Theſe inhabitants, though ſo different as to their native countries, are all ſubject to the ſame laws in reſpect of polity and civil government; and live in a quiet obedience to them and harmony with each other. As to religion, the original toleration ſtill obtains; and one ſees here all the ſects of Old England, and even thoſe of other proteſtant

proteſtant countries: but the Roman catholics, ſo far from being tolerated or connived at, are not admitted to ſettle in this colony.

All this country is of an extraordinary fertility, and particularly abounds in timber for ſhips; ſo that great numbers of veſſels are every year built in theſe parts, though the timber is not accounted the fitteſt for this uſe, as not laſting above eight or ten years, and therefore is made uſe of only for ſloops, bilanders, brigantines, and other veſſels of ſmall burden. Theſe large and wealthy provinces, ſuch as that of Boſton and the others, are ſubject to the ſovereign only, as agreeable to their own laws: the gentleneſs of the government to them ſecures their affection; and the governor ſent over to them from England is looked upon by the others only as one of their eminent fellow-citizens; and beloved for his care of the publick welfare and the tranquillity and ſafety of the whole ſociety. They allow him a competent ſalary: as they do alſo to the judges, for the more ſedulous adminiſtration of juſtice, without any further impoſt, tax, or demand. In order to prevent the leaſt encroachment on ſuch a ſtate of freedom, they allow of no fortifications or garriſons among them, that under pretence of ſecurity of their poſſeſſions their liberties may be in danger. Thus theſe provinces, in reality, conſtitute a kind of republick, partly admitting the political laws of England as depending on it; but either amends or rejects thoſe which may injure its immunities: the towns being the fortreſſes of the country, and the inhabitants the garriſons. Here is ſeen an univerſal concord, union, and friendſhip: the great do not deſpiſe or inſult the mean, nor the rich diſtinguiſh himſelf from the poor, by luxury, pomp, and an imperious carriage. Here alſo is none of that pernicious, diſhoneſt affectation of appearing above their circumſtances: and what is ſtill more admirable, that though five or ſix different ſects are openly profeſſed, we ſee none of thoſe feuds which naturally

naturally arise among persons of different persuasions. Nor do the inhabitants, notwithstanding they are composed of such different kinds, as Europeans, Creoles, Mestizos, and natives or Indians, the latter of which are intractable and ferocious, ever offer to disturb the government; but imitate, in this particular, the peaceful behaviour of the others. This sociable conformity greatly contributes to the increase of these colonies; for as many of the causes of the decay of families do not subsist here, nor is there any thing to create private differences, the repose in which they live, naturally induces young persons to marry; and the rather, as there is no difficulty in providing a subsistence: a quantity of fertile land being allotted to every one who petitions for it. Thus the territories of the colony increase, and as they increase are cultivated.

THE marquis de la Maison Forte having been carried to Boston after he was made a prisoner, drew up an exact account of this colony; and was pleased whilst we were both prisoners at Fareham in England, to communicate it to me; and it is from thence I have chiefly extracted the foregoing account. The marquis is of opinion, that within a century, Boston, in extent and number of people, will form a kingdom superior to that of England; and will be able to give law to all the neighbouring countries. This conjecture he deduces, and not without probability, from its amazing progress since the time of its first establishment; nor can it well be doubted, when at its commencement, as I may say, it had a spirit sufficient to undertake the conquest of such a place as Louisbourg; and a conduct to accomplish it; so that it is reasonable to expect, that with the future increment of power and people, it will exert the same spirit and conduct to remove by force all obstacles to its greater aggrandizement; especially as they can meet with little resistance, the whole country being, as it were, destitute of inhabitants.

BUT

But it must be observed, that though these colonies are so large, fertile, well peopled, and flourishing, yet the current money is not of metal, but of paper, in the form of common coin, being two round pieces pasted together, and stampt on each side with the arms of the colony: and of this there are pieces of all values from the lowest to the highest; and with these they buy and sell without making use of any metallic coin whatever. But as these are liable to grow foul, or break with use, there is a particular house which may be called a kind of mint, this paper-money being made there; and another in every town for the distribution of it. To these houses are brought all such pieces as from any cause whatever can no longer pass current: and here others of like value are issued in the lieu of them. In this particular the disinterestedness and probity of the directors of this money are really admirable, as having it in their power to enrich themselves by causing great numbers of this species to be struck, and putting them in their own purses.

The houses for distribution of this money receive remittances of new from the chief house at Boston, and pass accounts with the directors by sending those which have been brought for exchange. And such is the integrity of these judges, that even a slight suspicion of being capable of a fraud would be an injury to the high reputation in which they stand. But what seems strange and almost incredible is, that they, in whose power it is to give what value they please to the paper, by the stamps, of which they have the care, never have been known to abuse their trust: but the wonder ceases upon reflecting, that the former establishment of these colonies is in a manner owing to Quakers; and that, to the laws which they and the first settlers compiled, the colonies chiefly owe that quiet and prosperity they still enjoy. The Quakers are a kind of sectaries, who though zealously fond of several ridiculous and extravagant notions, cannot be sufficiently commended for

for their punctual obſervance of the laws of nature: ſometimes they carry this ſtrictneſs to ſuperſtition: and from this principle all the penalties laid on them in England could not bring them to take the oaths required by the government; ſo that at length they obtained from the parliament, that the ſimple affirmation of a Quaker ſhould have the ſame force as an oath, except in capital caſes. As they make ſuch a ſtrict profeſſion of truth, and lay down as a fundamental article of their belief, the neceſſity of inviolably adhering to their affirmation, they alſo make profeſſion of candour, juſtice and ſimplicity in all their dealings; and it is a thing well known, that all treaties, agreements and conventions made with Quakers, though only on their bare word, prove better founded and fulfilled, without any of that chicane and delay, which ſo often occurs in thoſe with other people, though corroborated by bonds, witneſſes, and ſecurities. Such perſons as theſe having the direction, diſtribution and making of the money in the colony of Pennſylvania, and others where it is current, the inhabitants are under no manner of concern with regard to any malverſation; nor can it morally be expected, for ſuch a breach of truſt would be a total departure from their faith. This has been their uniform conduct: and as this ſect has greatly increaſed in theſe colonies, they have always ſtrictly adhered to their ceremonies and rules; and irreproachably obſerved the maxims tranſmitted to them by their anceſtors; and this probity has doubtleſs communicated itſelf to the members of other religions, that among thoſe people to harbour the ſlighteſt ſuſpicion concerning the diſintereſtedneſs of their magiſtrates, would be an injury; thoſe virtues being as common here as they are rare among other nations.

THE traders ſell all their European goods in exchange for this money; and with it buy thoſe of the country; and conſign them to their correſpondents in

in other parts for vent: and having made up their gains in ſilver or gold they remit it to the bank in London: and as in their own country they ſtand in no need of coined gold or ſilver, they purchaſe with the yearly returns of their grains ſuch goods as they want: and theſe they ſend to Boſton on their account. Thus the commerce is every where kept up; and the ſilver and gold ſpecie remain in England. The wealthy inhabitants of Boſton have at the ſame time two capitals; one in effects and paper-money; and the other returns from the bank, where the principal reſts without any diminution.

Having given this ſhort account of the happy ſtate of theſe Engliſh colonies; and the means by which they are maintained, I ſhall add, as a concluſion of this ſubject, that the unfortunate Delivrance was not the only ſhip deceived by the falſe appearance of Louiſbourg being ſtill in the hands of the French. The ſame fate befel the Charmonte and Heron, two homeward-bound Eaſt-Indiamen; and who had orders to touch at no other port than Louiſbourg, where they would find a ſquadron of men of war, under whoſe convoy they might ſafely reach Europe.

CHAP. IX.

Voyage from Louisbourg *to* Newfoundland; *account of that Iſland, and the Cod fiſhery: and alſo of our voyage to* England.

I SHALL not trouble the reader with an account of the diſagreeable circumſtances of our captivity at Louiſbourg; but juſtice and gratitude will not permit me to paſs over the humanity of Mr. Warren, commodore of the Engliſh ſquadron; who, among many other inſtances of his kindneſs to us, beſides the honour of

of his table, which I ſeveral times enjoyed, recommended my papers to the care, and myſelf to the good treatment of the captain of the ſhip who was to carry me to England.

ON the 5th of October, arrived at Louiſbourg a packet-boat, which had been diſpatched for England with the news of the taking that place; and brought with her, grants from the king of England of the title of baronet to Mr. Warren, and to Mr. Pepperell; alſo two commiſſions for the former, appointing him governor of the iſland, and rear-admiral of the blue; and to the latter a colonel's commiſſion, accompanied with many gracious expreſſions, relating to the behaviour of theſe gentlemen. News at the ſame time arrived that a ſquadron of men of war was ready to ſail with a convoy, having on board two thouſand regular troops as a garriſon to the new conqueſt, and ſix hundred perſons of both ſexes towards peopling it, with proviſions, military ſtores, and every thing neceſſary to put it in a poſture of defence, in caſe the French ſhould attempt to recover it. The expectation of this ſquadron was the only thing that delayed the other at Louiſbourg, it being deſigned to convoy the Newfoundland fleet; and the time of its return to Europe now drew near. And as the arrival of the former could not be far off, preparations were making for our departure: and the priſoners of the three prizes, together with the few French families which remained diſperſed in their dwellings on the iſland, and on that of St. John, were to be diſtributed on board the ſhips of the ſquadron. I was ordered on board the Sunderland, commanded by captain John Brett, with whom my misfortune had before procured me ſome acquaintance; as likewiſe the captain and officers of the Delivrance with others; one of theſe was Monſieur de Baubaſtin, a perſon of great note in Louiſbourg; and who, as captain of the militia, was the more able to acquaint me with ſeveral particulars

particulars relating to the ſiege, in which I have reaſon to believe he did not ſpare himſelf.

On the 4th of October, we embarked on board our reſpective ſhips. The ſquadron conſiſted of the Princeſs Mary, commanded by captain Edwards, who as oldeſt captain was commodore, the Sunderland, the Superbe, and the Canterbury: the three firſt of ſixty guns, and the laſt of forty-ſix or fifty. The Heron and Charmante had alſo been fitted up as armed ſhips: the only ones remaining in the harbour, being the Vigilante, now repaired from the damages ſhe had received in the action, and the Cheſter.

My papers, as I have before obſerved, Sir Peter Warren delivered to captain Brett, with orders on his arrival in England to remit them to the admiralty. On the 19th of October, the ſquadron put to ſea, ſteering for Newfoundland. On the 22d, in the evening we had ſight of Cape Raze. On the 23d the wind being at S. W. the ſquadron tacked for the bay of Bulls, where it intended to anchor; but that being found impracticable, on the 24th it entered that of Ferryland, and remained there till all the merchant ſhips, which were taking in their lading of cod in the other harbours of the iſland, had rendeſvouzed: the method of this fiſhery and commerce, as likewiſe the iſland itſelf being little known in Europe, I ſhall give as good an account of it, as my late ſituation will admit of; the moſt innocent queſtions or undeſigning remarks, being ſuſpicious in a priſoner.

The capital of the iſland of Newfoundland, ſo famous for the cod-fiſhery along its coaſts and the neighbouring ſeas, is Placentia. Its firſt diſcovery and peopling was owing to the Spaniards before the year 1550, as the very name of the capital, and ſeveral other capes and parts of it, as Cape Buena Viſta, Punta Rica, ſufficiently demonſtrate. But probably the ſettlement they made here was of little force;

force; for in 1583, Humphry Girber an Engliſhman ſettled there; though he was afterwards obliged to evacuate it, and ſail for England in the following year; but did not reach it, periſhing in a ſtorm.

IN the year 1622, the Engliſh again returned to ſettle in this iſland, under the conduct of Mr. George Calvert, who, with more foreſight than his predeceſſor, brought with him all kinds of ſeeds grain, and pulſe, and immediately ſet his followers to work in clearing thoſe parts which ſeemed beſt adapted to culture; and accordingly the produce of his ſeeds contributed greatly to the comfortable ſubſiſtence of theſe new adventurers, beſides affording a ſtock for the enſuing years.

THE French had for a long time been in poſſeſſion of Placentia, and with it of the principal part of this iſland, but without any moleſtation to the ſettlements of the Engliſh on the eaſtern coaſts of it; and the veſſels of both nations quietly fiſhed together. The Engliſh, however, long entertained a deſire of making themſelves maſters of Placentia, as the only fortified town in the iſland, as alſo of the whole ſouthern part held by the French. They had tried force and negociations to compaſs their ends; but all their endeavours ended in diſappointment, till the peace of Utrecht, concluded betwixt that nation and Lewis XIV. of France; when they took advantage of the low ſtate to which that monarch was reduced, and inſiſted on the entire and abſolute ceſſion of Newfoundland; and ever ſince that time no other nation has ſettled there; though with a reſerve of the right of cod-fiſhing both to the French and Spaniards; to the former by articles nine, ten, and twelve of that ceſſion; and to the Spaniards by the 15th article of the ſame treaty.

THE country of this iſland is very unequal, and covered with hills and mountains; and theſe at a diſtance appear much higher than thoſe near the ſea.

They are alſo every where overgrown with pines or pruches, as the French call them, ſo as to be practicable only in thoſe parts, where the inhabitants have cut roads. This ſpecies of pine ſeldom exceeds the height of two or three toiſes in the open parts: but in valleys where they are ſheltered from the froſt and the piercing winds, they riſe to a much greater height. In winter the cold is exceſſive here, nothing but ſnow and ice being ſeen; and the bays and harbours entirely frozen. This ſevere weather ſets in ſo early, that though it was but the 21ſt of November when we were there, it froze to ſuch a degree, that we were obliged to wait till the ſun had begun to break the ice; and thus force a way through without waiting till the next day, leſt the froſt ſhould return; and then it would have been impoſſible, and the ſhips under the dreadful neceſſity of wintering among the ice.

This is the more remarkable, as the latitude of Placentia is only 47 deg. 10 min. and the bay where we happened to be was but little more. The inhabitants of the iſland keep themſelves ſhut up in their houſes during the winter, except in fair and ſun-ſhiny weather, when they go out with a great deal of pleaſure to enjoy the enlivening rays of the ſun.

The whole circuit of the iſland is full of bays and harbours, all ſo ſpacious and ſheltered on all ſides by the mountains except their entrance, that the veſſels lie in perfect ſecurity; they all grow gradually narrower from their entrance, that at the end of them, there is ſcarce room for a ſingle veſſel to anchor. Some of theſe harbours are a league and a half or two leagues in length; and their greateſt breadth about half a league. But there are alſo others much larger and ſome leſs; into them run ſeveral rivers and brooks, which beſides the fineneſs of their water afford great quantities of trouts and other kinds of freſh-water fiſh, ſeeming to vie with the

the ſea in fecundity. Theſe harbours are complete anchoring places, being clear, and having a good bottom, that they may be ſafely ſailed into without a pilot. Some there are with reefs of rocks, but theſe are generally viſible; and thoſe that are covered, are uſually about the capes or points at the entrance of the harbours: and therefore by keeping in the middle all danger is avoided. Theſe harbours are ſo near each other, as to be openly ſeparated by a point of land, which ſeldom forms a diſtance of above two leagues; ſo that the whole coaſt of the iſland, is a ſucceſſion of harbours. But it is not in all that the Engliſh have any town or village; and theſe, which are to be found only on the larger bays, and where the nature and diſpoſition of the country are moſt convenient for a ſettlement, are ſmall, and the inhabitants but few. Cod-fiſhing is the univerſal buſineſs; and beſides their dwellings they have offices and ſtore-houſes for preparing and laying up their fiſh till the time arrives for ſending it into Europe, on their own account, or ſelling it to veſſels which come there to purchaſe it in exchange for European goods. None of theſe villages are without a fort or battery for their ſecurity in time of war; but theſe are ſo inſignificant, that the moſt they could do would be to drive away ſome petty privateer. The greateſt extent of this iſland is from N. to S, being ninety-five leagues, that is, from Cape St. Mary, in 46 deg. 55 min. to the north cape, which forms the ſtreights of Belliſle in 51 deg. 20 min. And the diſtance from E. to W. that is, from Cape Raze to Cape Cod, is eighty leagues. But the ſettlements of the Engliſh are only about the harbours and in the country near Placentia; and along its bays eaſtward toward Cape Raze, and from thence to Cape Buena Viſta: all the remainder both up the country and along the coaſt, northwards towards the ſtreights, and from thence weſtward, is entirely deſart. This

muſt however be imputed to the rigour of the climate, and the badneſs of the ſoil, more than to any neglect of the proprietors, who ſeldom are wanting in induſtry, when they have a probability of ſuitable advantages. The inhabitants relate, that it was formerly peopled by a race of ſavage Indians, who ſince have retired to the continent; nor do they often viſit the iſland, and even when they do, they ſtay but a very ſmall time, returning to the continent from whence they came. This was indeed their cuſtom before ever the names of French or Engliſh were known in the iſland, retiring from the ſeverity of the froſts at the approach of winter. Theſe Indians generally live by fiſhing and hunting; and both this iſland, the Iſle Royale, and the adjacent parts of Canada, abound in buſtards and wild geeſe. There are alſo found, though in no great numbers, the quadrupeds of this country, as foxes, bears, beavers, and others: but the continual ſearch after them for the ſake of their ſkins has much leſſened their numbers.

Under all the ſeverity of the climate, they are not without ſome horned cattle; but theſe are preſerved with no leſs care and difficulty than at Louiſbourg. The inhabitants have alſo their little kitchen gardens for ſummer herbs: but all the other ſpecies of proviſions, as flour, ſalt, meat, &c. they are ſupplied with from Boſton, Pennſylvania, and other colonies to the ſouthward. With regard to the goods of other kinds, they are brought from England.

Having obſerved in chapter ſeven that the greateſt part of the French ſhips employed in the cod-trade do not take in their lading at Louiſbourg, it will be neceſſary to explain the nature of this trade; and in order to a more clear underſtanding of this traffick it is to be obſerved, that the ſhips both of that nation and thoſe of England, have two methods of carrying it on; one is to go to the fiſhing villages, and there buy a cargo in barter for goods, or to load with cod on their

their owners account; the other is to employ the ſhip's company in fiſhing in the inhabited bays; and for this the French make uſe of the harbours on the weſt part of the iſland of Newfoundland, which as being deſart, and likewiſe an article ſtipulated in the treaty of peace, no oppoſition is made to it: for this ſeems to me the meaning of the expreſſion often occuring in the treaties, *That the Engliſh ſhall admit the French and Spaniards into the harbours of Newfoundland:* and not as ſome inſiſt the harbours where the Engliſh have ſettlements, they having reſerved theſe for their own conveniency. This certainly is the moſt natural interpretation, for the latter being their dwelling and the beſt part of the iſland, it is not to be thought that they would give them away to others, the convenience of harbours being the ſole and chief advantage of this iſland: and this was the only point in view amidſt the conteſts of nations for the poſſeſſion of a country valuable only for the fiſhery; and where the inhabitants, at leaſt two-thirds of the year, labour under all the inconveniences and hardſhips of deep ſnows, hard froſts, and other rigours of winter.

THE weſtern coaſt of this iſland, diſtinguiſhed by the name of Petit Nord, and no leſs provided with bays and harbours than thoſe inhabited by the Engliſh, forms the department where the French veſſels repair to fiſh; as likewiſe north beyond the river of St. Laurence; and ſtretching eaſtward forms Belliſle ſtreight. In all theſe parts it is an inviolable rule, that the veſſel which comes firſt has the privilege of chuſing her bay, and the beſt part in it for fiſhing; and likewiſe has the title of admiral of it: and as ſuch not only all the timber works which happen to remain there belong to the maſter, but he alſo aſſigns to every veſſel her particular birth, though herein he has always a regard to the date of their coming into the bay: and during the whole time of the

fiſhery, he carries a flag at his main-top-maſt head. This diſtinction and the advantage of chuſing the ſtation for fiſhing, are ſuch powerful incentives to expedition, that though the harbours are generally frozen in the months of March and April, ſome ſhips arrive there during theſe months, and ſecure to themſelves the beſt ſtations, and build huts beforehand, by ſending ſome of their crew in their long-boats, when the ſhip is at the diſtance of fifty leagues or more from the coaſt; though it muſt be acknowledged, that this ardor is often attended with fatal conſequences; the boat during the darkneſs of the nights running on the large iſlands of ice common on the coaſt; and ſometimes founder in ſtorms, which are here very ſudden and violent. But theſe dangers are all overlooked by an attachment to gain and frivolous ambition. The ſucceſs or failure of this fiſhery depend indeed in a great meaſure on the ſtation of the ſhip, and the conveniencies for curing the fiſh. Beſides as the wages paid by the owners to the maſter, petty officers and men, is always one third part of the ſound fiſh brought to Europe, the ſhorter the time, the greater is the advantage to each man on board.

Though all the coaſts of Newfoundland may be ſaid to abound in cod, yet in ſome parts it is found in greater numbers than in others, and ſome there are which produce few or none. This proceeds from the quality of the bottom; for thoſe parts where the bottom is ſandy are fuller of fiſh than where it is rocky; but if the bottom be muddy, fiſh are very ſcarce: likewiſe in a great depth of water the fiſh are not caught in that plenty as when it does not exceed thirty or forty fathom. For though cod be found at a greater or leſs depth, yet this ſeems to be that which the cod moſt delight in.

Such are the motives for which the maſters of veſſels in this trade are ſo eager to be among the

firſt,

firſt, that they may chuſe their ſeveral conveniencies, in order to finiſh their fiſhery with the greater diſpatch; and returning early to Europe, may turn their cargo to a better account.

WHEN a ſhip has taken her ſtation, ſhe is immediately unrigged; and at the ſame time a fit place choſen for ſecuring the fiſh, as it is prepared: huts are likewiſe run up for the men who work aſhore, ſo as to form a kind of village; and at the water's edge is alſo built a large ſtage or ſcaffold. Here the number of launches deſigned for the fiſhery is got ready, and when built are left there till the following year; when he who firſt enters the bay, has the privilege of applying them to his own uſe. Every thing being ready, the whole ſhip's company, officers included, without exception of any one, are divided into as many claſſes as there are occupations: ſome fiſh, others cut off the heads, others gut the fiſh, which the French call habiller; whilſt others have the care of ſalting and laying them up. The fiſhers ſet out very early in their boats, that they may be at their ſtation by break of day, and do not return till the evening, unleſs they happen to have caught their boat-load before. This fiſhery is all performed with the hook; and every boat is provided with a ſufficient quantity of all kinds of fiſhing-tackle, to be ready at hand in caſe of any accident, as breaking a line or the like. On their return the fiſh is delivered to thoſe who open them; and that this may be done with the greater diſpatch, a boy ſtands by to hand them to them and take them away when cured. This work is done in a methodical manner; for he who beheads them does nothing elſe. They are opened with one cut lengthwiſe, their back-bone, and all their entrails are taken out; and another immediately taken in hand, and the offals thrown into the ſea. While ſome open, others ſalt, and others again pile up; and all this is done with the greateſt care and regularity. The next

day, or when the ſalt appears to have ſufficiently penetrated, they waſh them, and take them in pairs by the tails, then ſhake them in the water in order to carry off the ſcum extracted by the ſalt: afterwards, that the water may run off, they are piled up on little boards; then they are ſtretched out one by one, with the ſkin upwards, in order for drying, where they are turned three or four times. Being thus thoroughly dried, they are piled up in ſmall parcels, that they may not entirely loſe the heat communicated to them by the firſt ſalt: and now being ſalted a ſecond time, they are laid up in regular heaps on the ſtage; and there they remain till the time of ſhipping them. As the boats go conſtantly every day, the work of the ſeveral claſſes may be imagined pretty hard and fatiguing. On the return of the boats they immediately begin with opening and ſalting the fiſh, which takes up the greater part of the night; and the ſucceeding parts of the curing above-mentioned neceſſarily keep them employed the following day, when the return of the barks call upon them to renew their taſk; that thus they have very few hours left for ſleep and refreſhment. There are two kinds of cod, as to their quality; and of each three ſizes. Both have a line running from the gills to the tail; following the figure of the belly of the fiſh, and winds a little downwards from the head to the tail; but this is more diſtinct in one ſpecies than the other: and the whole fiſh from this line to the back is of a dark brown, whilſt the lower part is ſpotted with white. The connoiſſeurs in fiſh ſay that this is better than the other; the whole body of which is of a darkiſh white with reddiſh ſpots; but the belly and all its hinder parts the whiteſt. I ſhall not enter into an account of the diſproportion of its head comparatively to the other fiſhes, or the quantity of oil made from it and the livers, which are alſo very large.

As

As to the ſpecies diſtinguiſhed by their ſize, the ſtandard cod is that which is two feet in length with the head off. The ſecond is ſmaller, called the middling: the third is the leaſt. The dealers in this commodity however ſubdivide it into ſeven or eight kinds: one of theſe is a fiſh in the opening of which, or in ſevering the head, ſome fault has been committed.

ANOTHER kind of fiſhery; but followed more by the French than any other nation, is that of the Mud-fiſh: and they cure it in the following manner. This fiſh is caught on the great bank of Newfoundland; and others as far as ſandy iſland ſouth of L'iſle Royale: and as ſoon as it is caught it is opened, ſalted, and laid in little piles in the hold of the ſhip, till it has ſufficiently purged; then they ſhift its place, and having ſalted it a ſecond time, ſtow it for the voyage. The ſhips intending for this fiſhery, repair to the bank in the beginning of February: as that caught in ſummer, that is, after June or July, or any of the banks, is inferior to that caught at the end of winter, theſe ſhips finiſh their fiſhery and return to Europe with ſuch diſpatch, that ſometimes they are known to make two voyages in a year. For it is the ſouth part of the bank that this fiſh chiefly haunts: and theſe likewiſe are accounted better than thoſe taken on the north.

THE cod appears to be one of the moſt prolifick kind of fiſh. Of this there needs no other proof than the great number of ſhips which annually load with it only from this iſland: and it is only known in theſe ſeas; for though the Britiſh channel and the German ocean are not without this fiſh, their numbers are ſo inconſiderable comparatively to thoſe of Newfoundland, that they may rather be looked upon as ſtragglers. Some perſons of long experience in this fiſhery, informed us that the cod ſpawns twice a year; and beſides the infinite number of their animalculæ, it is very

very ſeldom that any of them miſcarry; for they depoſit them in the ſand; and thus by a natural inſtinct they are laid on theſe banks, to which they adhere; without being ever removed by any agitation of the waters, till impregnated with life. The cod alſo delights to continue at the bottom; at leaſt is never ſeen on the ſurface of the water. But though their number is ſtill immenſe, they are evidently diminiſhed; a proof of this is, that much fewer are now caught in the ſame ſpace of time, than there were twenty-five or thirty years ago.

The coaſt of the continent oppoſite to Newfoundland is inhabited by Indian ſavages; and though the crown of France keeps poſſeſſion of it for the conveniency of the fiſhery; it has no proper ſettlement: and was repreſented only by a perſon who ſolicited and obtained, without much difficulty, the title of governor of theſe countries. He kept up a good correſpondence with the Indians, and lived among them. The winters he ſpent ſolitarily with his wife and family; in ſummer time he enjoyed the company of the maſters of the fiſhing veſſels. Thus he ſpent many years, and as I have been informed, it was not till this preſent year 1745, or a little before, that he retired to Canada; and rather out of indulgence to his wife's fears of ſome misfortune in the preſent war, than from his own inclination. Theſe Indians live very eaſily with the French, come to their huts, and bring them game in exchange for brandy, wine, and toys: but are much addicted to theft, as many ſhips have experienced by the loſs of their ſails and other parts of their furniture when aſhore; ſo that it has been found neceſſary to keep a conſtant guard; and for greater ſecurity, the tents and huts are ſo diſpoſed, as entirely to environ on the land-ſide, as in a fort, the whole ſpot of ground where their other neceſſaries are kept. Theſe precautions

cautions and the known alertneſs of the French on any ſudden alarm, have diſheartened the Indians, that of late, deſpairing of ſucceſs, they ſeem to have deſiſted from their pilfering practices.

THE manner of the Engliſh fiſhery on the bays of the eaſt coaſt of Newfoundland, is carried on in the ſame manner as that of the French before deſcribed; and whether it be that the great bank lies neareſt, or that its bottom is ſuch as this fiſh moſt delights in; and where conſequently it is more numerous than in the weſtern parts, that nation choſe theſe parts preferably to the others, as the French do not frequent the weſtern ſo much as the Petit Nord.

THE froſts being ſet in, laid our ſquadron under a neceſſity of haſtening out of this bay, which it left on the 21ſt of November, with the veſſels under its convoy; and in the offing was joined by many others, ſo as in the whole to form a fleet of betwixt ſixty and ſixty-five ſhips of all ſizes: and among theſe were two frigates of forty guns, who had continued cruiſing in theſe parts to ſecure the fiſhery againſt any attempts of the French privateers. Our voyage to England afforded nothing remarkable; and on the morning of the 22d of December, the ſquadron anchored in Plymouth-ſound, except the Sunderland, which kept on her courſe with a conſiderable part of the convoy, and at three in the afternoon came to an anchor in Dartmouth-road.

WHILST our ſquadron lay at Newfoundland, and in the paſſage to England, it met with ſeveral ſtorms, which I ſhall ſpecify, in order to convey ſome idea of what may be expected in theſe ſeas. On the 3d of November, the wind blowing freſh at W. and with all the appearances of a violent ſtorm, the wind abated and the weather cleared up. But on the tenth of the ſame month we had a ſtorm at N. W. laſting from two in the afternoon, till two the next morning; and on its decline

decline ſnow and ſhowers. On the 14th it began to blow freſh in the morning; and at noon came on a ſtorm no leſs violent than the former, at N. E. and E. N. E. It continued in this point till the 15th, when in the morning it ſhifted to the north, though blowing ſtill with the ſame force; but at four in the evening it began to abate. This was ſucceeded by thick ſnow: and on the 17th, and the days following, came on thoſe froſts which obliged the ſquadron to haſten its departure from that iſland.

Whilst we were on our voyage, namely on the 22d of the ſame month of November, we had hard gales at eaſt, which on the 23d increaſed to a direct ſtorm, that laſted with all its violence till the 26th, when the wind came about to S. W. and the fog which had covered the whole atmoſphere cleared up. On the 27th of the ſame month, it began to blow hard at S. W. and thus continued at the ſame point, and at S. and W. without abating in violence till the 4th of December; when ſhifting to the N. W. we had fine weather. Afterwards the wind was at N. W. and N. and from thence veered to the N. E. and E. where it continued with ſome violence till the 21ſt of December; on the evening of which it came about to the S. and S. S. W. that the fleet was obliged to work up the channel. In 48 deg. 45 min. lat. the lead was hove, and found 78 fathom water, with a bottom of fine white ſand, which is the particular mark of the entrance of the channel.

Dartmouth harbour is a kind of road or open bay, at the end of which ſtands the town of that name. The country is delightfully interſperſed with ſeats and farm-houſes; which, with the various cultivation of the hills and plains, the verdure of the paſtures, and the hedges ſeparating the fields, make a moſt agreeable appearance; and ſhow the goodneſs of the ſoil, and the induſtry of the inhabitants. We

ſtayed

ſtayed here no longer than till the wind favoured our proceeding to Portſmouth, which was the rendezvous of the whole ſquadron; and on the 28th the wind veering to the S. W. and W. we got under ſail; and on the 29th the ſhip anchored at Spithead, where at that time lay ſeven three deck ſhips carrying from 90 to 100 guns. From the ſhip I was carried to Fareham, a pleaſant village at the upper end of Portſmouth-harbour, and about three leagues by land from the town. This being appointed for the place of my captivity, and of thoſe who had been included in the capitulation of Louiſbourg: the fate of the others was to be confined in the common priſon at Porcheſter caſtle. The commiſſaries indeed could not well take upon them to diſpenſe with the ſtrictneſs of their orders. I muſt not here omit the courteſy and generoſity of captain Brett of the Sunderland, to all the priſoners of any rank, whom he not only admitted to his table during the voyage, but prevailed on all the other officers to imitate this good example; and who ſeemed to vie in civilities towards us, and humanity towards the inferior ſort; ſparing for nothing to alleviate our misfortunes. And let this remain a monument of my gratitude to ſuch a generous ſet of gentlemen.

WE arrived in England at the time when Charles Edward eldeſt ſon of the Chevalier de St. George landed in the north of the kingdom, among the Scots Highlanders; and was by their aſſiſtance endeavouring to recover the throne of his anceſtors; though with how little ſucceſs is now known to all the world. Theſe commotions left little hopes of a favourable reception to us priſoners, whoſe long ſufferings and hardſhips naturally cauſed more ardent longings after eaſe and liberty: and the jealouſies, which in ſuch caſes are only a prudent care, together with the irregularity of ſome priſoners, who, contrary to the rules of honour, abuſe any indulgence ſhewn them, and violate

their

their parole, occaſioned an order for abridging the priſoners of ſeveral privileges they had before enjoyed, and confining them with greater ſtrictneſs. However, the favours which Mr. Brookes, commiſſary for the French priſoners, and Mr. Rickman, who acted in the ſame capacity for the Spaniards, were pleaſed to ſhew me, were accompanied with ſuch politeneſs and cordiality, that I became entirely eaſy under my preſent condition, and even the reflection on my misfortunes grew leſs painful. Here I could expatiate in the praiſe of theſe two gentlemen; the former to his learning, abilities, and addreſs in the conduct of affairs, added the moſt endearing humanity, of which all the priſoners in his department felt the good effects; but I ſhall not inſiſt on a character, the brightneſs of which would be but obſcured by the praiſes of my inſufficient pen.

The commiſſary for the Spaniſh priſoners, was Mr. William Rickman, under whoſe care conſequently I ſhould have been, without the circumſtance of having been taken in a French ſhip: yet my being a Spaniard recommended me to his kindneſs, which I with gratitude own he carried to a very great height; and I had a large ſhare of thoſe acts of goodneſs by which he has deſerved the univerſal acknowledgement of the whole Spaniſh nation. For from the beginning of the war, and the taking of the Princeſſa, he exerted all poſſible care for the comfort of the common priſoners: and the chief officers he even lodged at his own ſeat, and many others at an adjacent farm-houſe, about a quarter of a league from Tichfield in the London-road, called Peſbrook, and about three miles from Fareham. He made public and private ſolicitations in their behalf: he treated all with affability, and uſed the greateſt diſpatch in their ſeveral affairs: he raiſed charitable contributions, which were chiefly laid out in apparel

for thoſe of the lower claſs; and the officers he in the moſt genteel manner furniſhed with money, that they might live in tolerable decency.

BOTH the abovementioned gentlemen offered to join their intereſt in ſoliciting the admiralty for my papers, which was the thing I had moſt at heart; but I judged that Mr. Brookes, being the commiſſary to whom I belonged, it would come beſt from him to incloſe my petition, with his recommendation to the duke of Bedford, and the admiralty, that they would be pleaſed to order my papers to be examined for their ſatisfaction, and then return them to me. The anſwer was entirely becoming the generoſity of that nation among which the chance of war had brought me: this was, that the duke of Bedford, as firſt commiſſioner of the admiralty, and the other lords of that board unanimouſly, and with pleaſure granted the contents of my memorial; nobly adding, that they were not at war with the arts and ſciences or their profeſſors, that the Engliſh nation cultivated them; and it was the glory of its miniſters and great men to protect and encourage them. In the ſame generous ſtrain ran all the anſwers with which the admiralty were pleaſed to honour me with, by their ſecretary Mr. Corbet; and this condeſcenſion put into my hands an opportunity of ſoliciting ſeveral favours to the great relief of the Spaniſh priſoners who were in Fareham hoſpital, and the common priſon, beſides ſome perſonal favours for myſelf. The worthy Mr. Brookes, ſoon after my arrival, had offered to procure me a warrant for going over to France in a packet-boat, which was to carry over to St. Malo the Louiſbourg captives. But I could not think of going out of England and leaving my papers behind me.

THE inſurrection in Scotland induced the admiralty to iſſue orders, that all priſoners who were upon leave in London, ſhould immediately repair to ſome

ſome diſtant places; though in this no more was meant than their own ſecurity, leſt in the preſent commotions the people ſhould riſe upon them being Roman catholics, the ſovereigns of which religion were judged to foment the rebellion. On this I laid aſide all thoughts of ſoliciting leave to go to London, though I was not inſenſible that my affairs required my perſonal attendance there. Thus I was obliged to wait till the agitation of the court ſubſided; for as by their importance they neceſſarily took up the attention of all the perſons at the helm, a conſiderable time naturally elapſed, before I had the pleaſure of ſeeing the accompliſhment of the admiralty's promiſes relating to my papers.

It was not long before the ſcale was turned, by the great levies of troops in England, and the tranſportation of others from Flanders to act againſt thoſe of the pretender, whoſe ſon having ſuſtained a defeat, and being deſtitute of all reſource, was obliged to withdraw from the kingdom. On this the perturbations in the minds of the people ſubſided; and the miniſtry ſeemed to be more at leiſure for attending to private affairs.

This revived my thoughts of forwarding my affairs, by a perſonal ſolicitation at London. I found no difficulty in obtaining the uſual permiſſion, and had the pleaſure of performing the journey in company with Mr. Brookes, whom buſineſs called to that capital, where we arrived on the 12th of April.

On my firſt attendance at the office for priſoners of war, an order was ſhewn me from my lord Harrington, ſecretary of ſtate, for bringing me to his houſe. This nobleman having been ambaſſador for ſome years in Spain, among his other eminent qualities had a great affection for the Spaniards, which he was pleaſed to extend to me in a moſt obliging reception, and aſſurances that nothing ſhould be wanting

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in him to procure me my papers, or do me any other good offices.

MARTIN FOLKES, Esq. president of the Royal Society of London, a person equally distinguished for his learning, politeness and readiness to do every good action in his power, being informed I was a prisoner at Fareham, and that my papers were lodged at the admiralty; and fearing they might fall into the hands of persons entirely ignorant of their contents, and by that means be mislaid or abused, had applied for having them delivered to himself; alledging, that as the subject of them related to the sciences, none could be fitter for them than the society. But as they were unhappily mingled with many others of a very different kind taken at the same time, it was difficult to separate them without the presence of the author himself, to distinguish them by the hand and other marks. By his assistance and the alacrity of Mr. Brookes, who was determined not to give himself any rest till the affair was ended to my satisfaction, an order of the admiralty was obtained to the secretary of the India company, to whom they had all been sent, that I might make a search for them, and those which I should separate were to be sent to the admiralty. This order met with such a punctual compliance, that it was executed the very day of its date.

THE president of the Royal Society, for whom all the lords of the admiralty entertained an esteem suitable to his great merit, was again pleased to interest himself in behalf of my papers; and in regard to his solicitations the examination of them was referred to himself. This gentleman, who possessed in the highest degree all the social and intellectual qualities, affability without artifice, a genius which nothing could escape, an amiable deportment, and generous manners, had from my first arrival shewn me great kindness; he introduced me to the meetings of the

ſociety: and thus to him I owe the acquaintance of many perſons of diſtinction, and the marks of friendſhip I received from them. He condeſcended to carry me to the moſt famous muſeums, places of delight to a rational curioſity, where all nature is collected into a living hiſtory of the ſeveral products of the waters and earth, both in the mineral, vegetable and animal kingdoms. He further brought me acquainted with ſeveral of the moſt diſtinguiſhed literati: and carried his friendſhip very far beyond any thing I could have expected.

The recommendation of ſo diſtinguiſhed a perſon, to whoſe judgment ſo much deference was paid in all things, together with the honour of having been one of the two appointed for meaſuring the degrees of the earth in Peru, had ſuch an influence on the patrons of ſcience, that I ſhould wrong them did I not acknowledge, that to them I chiefly owe the happineſs of recovering my papers, my liberty, and the polite treatment ſeveral perſons of rank and quality were pleaſed to ſhew me.

Actions like theſe convinced me of the ſincerity of the Engliſh, their candour, their benevolence and diſintereſted complaiſance. I obſerved the tempers, inclinations, particular cuſtoms, government, conſtitution and policy of this praiſe-worthy nation, which, in its œconomical conduct and ſocial virtues, may be a pattern to thoſe who boaſt of ſuperior talents, to all the reſt of mankind.

Mr. Folkes having gone through my papers, made his report to the admiralty; and ſo much in my favour, that were I to inſert it here, it would be the moſt honourable teſtimonial of our work; and that board being thoroughly ſatisfied, gave him leave, according to his deſire, to deliver them up to me; which he did on the 25th of May. But as a more illuſtrious teſtimony of the great eſteem with which he honoured me, he propoſed to Earl Stanhope and

ſeveral

ſeveral other gentlemen of the Royal Society, that I might be admitted a member of that learned body, rightly judging that ſuch an honour could not fail of adding an ardour to my deſire of contributing to the improvement of the ſciences. Having thus happily finiſhed my affairs, and obtained my liberty at the firſt ſolicitation for it, I embarked at Falmouth in the Liſbon packet boat; my predominant inclination now being to ſee my native country, after ſuch a variety of adventures. On my ſafe arrival at Liſbon, I haſtened to Madrid, which I reached on the 25th of July 1746; eleven years and two months after my embarkation at Cadiz on this commiſſion.

I found Spain in mourning for the loſs of its late excellent ſovereign Philip V. who had paſſed to a better ſtate, on the 9th of the ſame month. My firſt care was to wait upon the Marquis de la Enſenada, ſecretary of ſtate, with my papers, that he might lay them before his majeſty; whom God long preſerve. His majeſty was pleaſed to order that theſe papers ſhould be publiſhed under his patronage; a declaration truly becoming a prince, who, to all the eſtimable qualities of a king and a man, has added a love for the ſciences.

THUS have we concluded a work, which has been long expected by all nations. Its importance entitled it to the encouragement of the greateſt monarchs; and the length of time employed in it, has kept in an impatient ſuſpenſe, the learned of Europe.

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